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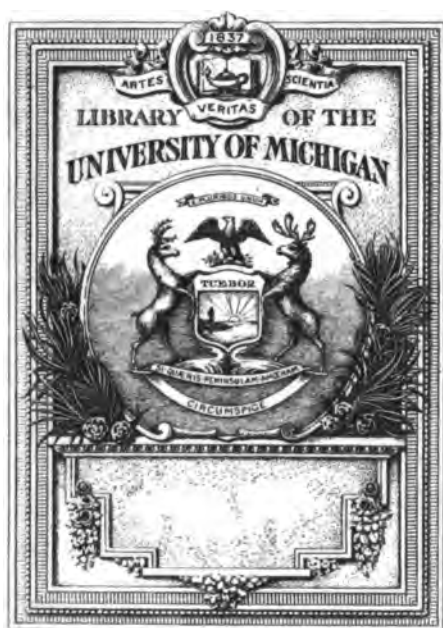
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TWENTY-FIRST ANNUAL REPORT

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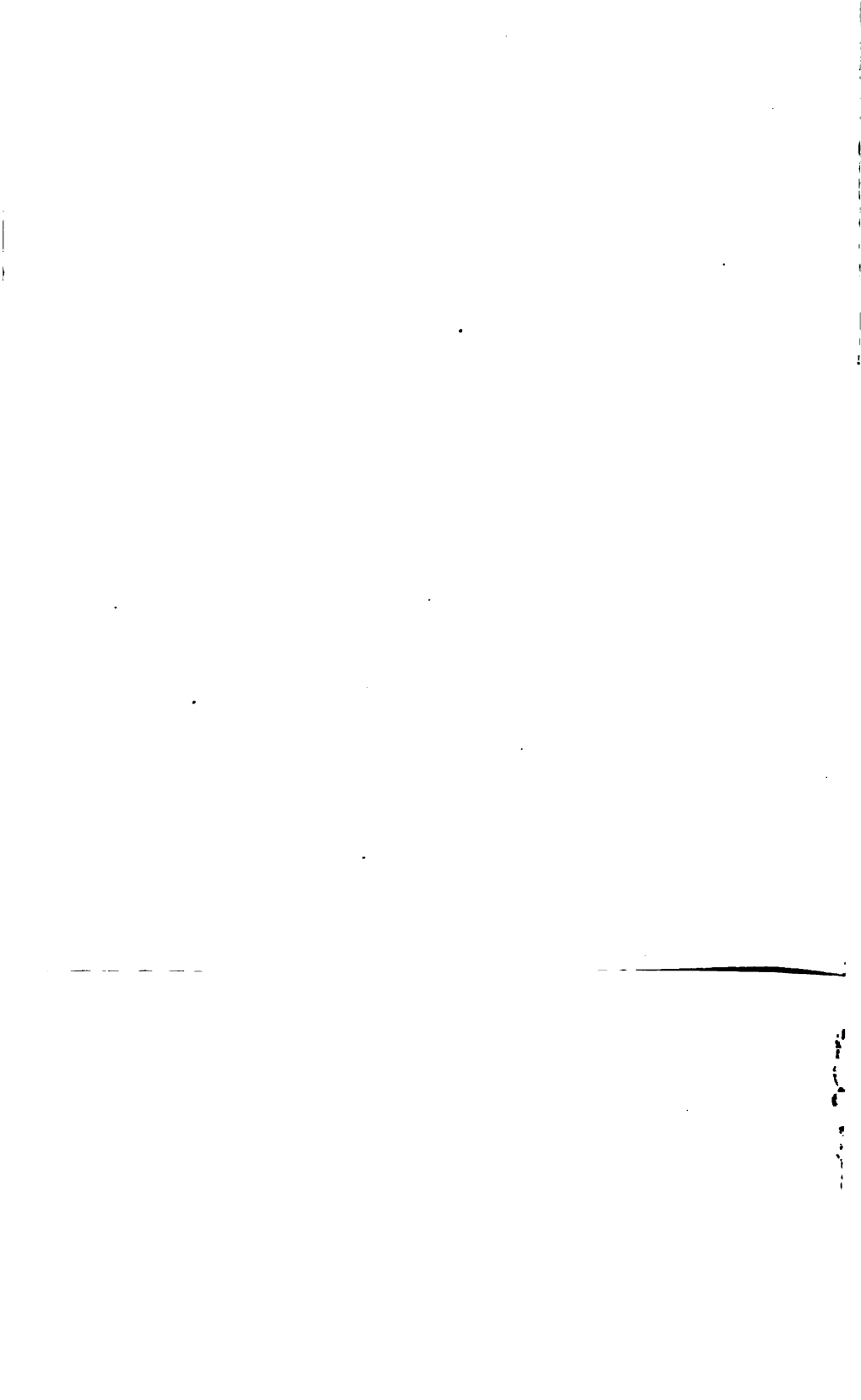
*Commerce*  
BUREAU OF STATISTICS OF LABOR.

MARCH, 1891.

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*With compliments of*  
*Horace L. Madlin,*

*Chief of Bureau of Statistics of Labor.*



TWENTY-FIRST ANNUAL REPORT

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BUREAU OF STATISTICS OF LABOR.

MARCH, 1891.

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BOSTON :  
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,  
18 POST OFFICE SQUARE.  
1891.



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7-9-29*

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BUREAU OF STATISTICS OF LABOR,  
CLAPLIN BUILDING, 20 BEACON STREET,  
BOSTON, March, 1891.

TO THE HONORABLE SENATE AND HOUSE OF REPRESENTATIVES:

I have the honor to transmit, herewith, the Twenty-first  
Annual Report of the Bureau of Statistics of Labor.

Very respectfully,

HORACE G. WADLIN, *Chief.*



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TWENTY-FIRST ANNUAL REPORT  
OF THE  
BUREAU OF STATISTICS OF LABOR.  
1890.

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INTRODUCTION.

The Twenty-first Annual Report herewith presented consists of the following Parts; each of which, being independent in itself, has been transmitted to the legislature or given to the public as soon as ready, in advance of the complete full Report, under the authority of Chapter 97 of the Acts of 1890.

- Part I. Labor Laws of Massachusetts.
- Part II. Population of Massachusetts. 1890.
- Part III. Abandoned Farms.
- Part IV. Net Profits in Manufacturing Industries.

Each of these Parts has a distinct value in itself and each presents different phases of the general subjects with which the Bureau deals. As complete analysis of the topics treated in them accompanies the Parts, it is not necessary to enlarge upon them here. As the entire volume is not published until the adjournment of the legislature, it is possible to incorporate here the labor legislation of the session of 1891, supplementing the codification of the Labor Laws contained in Part I. and thus presenting in connection with that Part a complete codification of the Labor Laws of the Commonwealth.

## LABOR LEGISLATION OF 1891.

[CHAP. 125.]

## AN ACT TO PROHIBIT THE IMPOSITION OF FINES OR DEDUCTIONS OF WAGES OF EMPLOYEES ENGAGED AT WEAVING.

*Be it enacted, etc., as follows:*

SECTION 1. No employer shall impose a fine upon or withhold the wages or any part of the wages of an employee engaged at weaving for imperfections that may arise during the process of weaving.

SECTION 2. Any employer who shall violate the provisions of this act shall be subject to a fine of not more than one hundred dollars, and for a second and subsequent violation of this act shall be fined not more than three hundred dollars.

SECTION 3. For a period of ninety days after the passage of this act copies thereof shall be posted in conspicuous places in the respective weaving rooms of the different factories in which fines are levied. A failure or refusal to so post shall be punished by a fine of not less than twenty-five dollars. Inspectors of public buildings shall enforce the provisions of this act.

SECTION 4. Chapter three hundred and sixty-one of the acts of the year eighteen hundred and eighty-seven is hereby repealed. [Approved March 27, 1891.]

[CHAP. 209.]

## AN ACT TO PROHIBIT THE EMPLOYMENT OF PRISONERS OUTSIDE THEIR PLACES OF CONFINEMENT.

*Be it enacted, etc., as follows:*

SECTION 1. A prisoner serving a sentence in any state institution shall not be employed outside the precincts of such institution in any mechanical or skilled labor for private parties.

SECTION 2. This act shall take effect upon its passage. [Approved April 17, 1891.]

[CHAP. 239.]

## AN ACT RELATING TO THE WEEKLY PAYMENT OF WAGES BY CORPORATIONS.

*Be it enacted, etc., as follows:*

SECTION 1. Section two of chapter eighty-seven of the acts of the year eighteen hundred and eighty-six, as amended by chapter three hundred and ninety-nine of the acts of the year eighteen hundred and eighty-seven, is hereby further amended by striking out after the word "act", in the ninth line of said section as amended, the words "for a period of two weeks after", also by striking out all of the tenth line in said section, and by striking out in the eleventh line thereof the words "that such complaint will be brought", so as to read as follows:—

Section 2. Any corporation violating any of the provisions of this act shall be punished by a fine not exceeding fifty and not less than ten dollars on each complaint under which it is convicted: *provided*, complaint for such violation is made within thirty days from the date thereof. The chief of the district police, or any state

inspector of factories and public buildings, may bring a complaint against any corporation which neglects to comply with the provisions of this act. On the trial of such complaint such corporation shall not be allowed to set up any defence for a failure to pay weekly any employee engaged in its business the wages earned by such employee to within six days of the date of said payment, other than the attachment of such wages by the trustee process, or a valid assignment thereof, or a valid set-off against the same, or the absence of such employee from his regular place of labor at the time of payment, or an actual tender to such employee at the time of payment of the wages so earned by him. No assignment of future wages payable weekly under the provisions of this act shall be valid if made to the corporation from whom such wages are to become due, or to any person on behalf of such corporation, or if made or procured to be made to any person for the purpose of relieving such corporation from the obligation to pay weekly under the provisions of this act.

SECTION 2. The corporation against whom a complaint is brought under the provisions of said section shall not be allowed to set up as a defence any payment of wages after the bringing of the complaint. [*Approved April 24, 1891.*]

[CHAP. 244.]

AN ACT RELATING TO THE DISCHARGE OF MECHANICS' LIENS.

*Be it enacted, etc., as follows:*

Section forty-five of chapter one hundred and ninety-one of the Public Statutes is hereby amended by inserting after the word "creditor", in the second line, the words:—by himself or his attorney,—so as to read as follows:—*Section 45.* When a debt secured by a lien under this chapter is fully paid, the creditor by himself or his attorney shall, at the expense of the debtor, enter a discharge of his lien on the margin of the record of the statement, or shall execute a release, which may be recorded where the statement is recorded. [*Approved April 24, 1891.*]

[CHAP. 302.]

AN ACT RELATING TO THE DISTRICT POLICE FORCE.

*Be it enacted, etc., as follows:*

SECTION 1. The governor may increase the number of members of the inspection department of the district police force by the appointment of two female inspectors who shall receive an annual salary of one thousand dollars each.

SECTION 2. This act shall take effect upon its passage. [*Approved May 7, 1891.*]

[CHAP. 317.]

AN ACT RELATING TO THE EMPLOYMENT OF MINORS WHO CANNOT READ AND WRITE IN THE ENGLISH LANGUAGE.

*Be it enacted, etc., as follows:*

Section two of chapter four hundred and thirty-three of the acts of the year eighteen hundred and eighty-seven, as amended by chapter one hundred and thirty-five of the acts of the year eighteen hundred and eighty-

nine, is hereby further amended by striking out the word "regularly", in the tenth line of said chapter one hundred and thirty-five; also by striking out, in the twelfth, thirteenth and fourteenth lines of said last named chapter, the words "providing such minor has been, since reaching the age of fourteen years, for one year continuously a resident of", and inserting in place thereof the words: — and who resides in, — so as to read as follows: — *Section 2.* Every person who employs, or permits to be employed, a minor fourteen years of age, or over, who cannot read and write in the English language, and who resides in a city or town in this Commonwealth wherein public evening schools are maintained, and is not a regular attendant of a day school, or has not attained an attendance of seventy per cent. or more of the yearly session of the evening school, shall, for every such offence, forfeit not less than fifty nor more than one hundred dollars, for the use of the evening schools of such city or town. [*Approved May 7, 1891.*]

## [CHAP. 350.]

## AN ACT CONSTITUTING NINE HOURS A DAY'S WORK FOR COUNTY EMPLOYEES.

*Be it enacted, etc., as follows:*

SECTION 1. Section one of chapter three hundred and seventy-five of the acts of the year eighteen hundred and ninety is hereby amended by inserting before the word "city", in the fourth line thereof, the word: — county, — so as to read as follows: — *Section 1.* Nine hours shall constitute a day's work for all laborers, workmen and mechanics now employed or who may be employed by or on behalf of the Commonwealth of Massachusetts or any county, city or town therein; and all acts and parts of acts inconsistent with this act are hereby repealed.

SECTION 2. This act shall take effect on the first day of January in the year eighteen hundred and ninety-two. [*Approved May 21, 1891.*]

## [CHAP. 357.]

## AN ACT TO PREVENT THE MANUFACTURE AND SALE OF CLOTHING MADE IN UNHEALTHY PLACES.

*Be it enacted, etc., as follows:*

SECTION 1. Whenever any house, room or place used as a dwelling, is also used for the purpose of carrying on any process of making, altering, repairing or finishing for sale any ready-made coats, vests, trousers or overcoats, it shall, within the meaning of this act, be deemed a workshop: *provided, however,* that the exercise of such work in a private house or private room, by the family dwelling therein or by any of them, shall not of itself constitute such house or room a workshop within this definition; every such workshop shall be kept in a cleanly state and shall be subject to the provisions of this section; and each of said garments made, altered, repaired or finished for sale in any of such workshops shall be subject to the inspection and examination of the inspectors of the district police, for the purpose of ascertaining whether said garments, or any of them, or any part or parts thereof, are in cleanly condition and free from vermin and every matter of an infectious and contagious nature; and every person so occupying or having control of any workshop as aforesaid shall, within fourteen days from the passage of this act or from the time of beginning

work in any workshop as aforesaid, notify the chief of the district police or the special inspector appointed for that purpose, of the location of such workshop, the nature of the work there carried on and the number of persons therein employed.

SECTION 2. If said inspector finds evidence of infectious disease present in any workshop, or in goods manufactured or in the process of manufacture therein, he shall report the same to the chief of the district police, who shall then notify the state board of health to examine said workshop and the materials used therein, and if said board shall find said shop in an unhealthy condition, or the clothing and materials used therein to be unfit for use, said board shall issue such order or orders as the public safety may require.

SECTION 3. Whenever it shall be reported to said inspector, or to the chief of the district police, or to the state board of health, or either of them, that ready-made coats, vests, trousers or overcoats are being shipped to this Commonwealth, having previously been manufactured in whole or in part under unhealthy conditions, said inspector shall examine said goods and the condition of their manufacture, and if upon such examination said goods or any of them are found to contain vermin, or to have been made in improper places or under unhealthy conditions, he shall make report thereof to the state board of health, which board shall thereupon make such order or orders as the safety of the public shall require.

SECTION 4. Whoever knowingly sells or exposes for sale any ready-made coats, vests, trousers or overcoats which have been made in a tenement house used as a workshop, as specified in section one of this act, shall have affixed to each of said garments a tag or label, not less than two inches in length and one inch in width, upon which shall be legibly printed or written the name of the state and the city or town where said garment or garments were made.

SECTION 5. No person shall sell or expose for sale any of said garments without a tag or label, as aforesaid, affixed thereto, nor shall sell or expose for sale any of said garments with a tag or label in any manner false or fraudulent, nor shall wilfully remove, alter or destroy any such tag or label upon any of said garments when exposed for sale.

SECTION 6. The governor of the Commonwealth is hereby authorized to appoint two additional members of the inspection department of the district police force qualified to perform the duties of the members of such department.

SECTION 7. Whoever violates any of the provisions of this act shall forfeit for each offence not less than fifty dollars nor more than one hundred dollars. [*Approved May 28, 1891.*]

[CHAP. 361.]

AN ACT RAISING THE COMPULSORY SCHOOL AGE TO FIFTEEN YEARS  
IN CITIES AND TOWNS WHERE OPPORTUNITY IS GIVEN FOR INDUSTRIAL  
EDUCATION.

*Be it enacted, etc., as follows:*

SECTION 1. In every city and town where opportunity is furnished, in connection with the regular work of the public schools, for gratuitous



instruction in the use of tools or in manual training, or for industrial education in any form, every person having under his control a child between the ages of eight and fifteen years shall cause such child to attend the public schools during the same number of weeks in each school year during which attendance is now by law required in the case of children between the ages of eight and fourteen years, and subject to the same exceptions; and for neglect of such duty the person offending shall be liable to the same forfeiture, to be enforced in the same manner and subject to the same exceptions as now provided by law in case of neglect to require the attendance of a child between the ages of eight and fourteen years.

SECTION 2. This act shall take effect upon the first day of August in the year eighteen hundred and ninety-one. [Approved May 28, 1891.]

[CHAP. 371.]

AN ACT RELATING TO THE EMPLOYMENT OF PRISONERS.

*Be it enacted, etc., as follows:*

SECTION 1. Section two of chapter four hundred and three of the acts of the year eighteen hundred and eighty-eight is hereby amended by striking out the words "two hundred and", in the fifteenth line of said section, so as to read as follows:—*Section 2.* The number of persons employed in any industry in the state prison, Massachusetts reformatory, or reformatory prison for women, or in any house of correction, shall not exceed one twentieth of the number of persons employed in such industry in the state, according to the classification given in the census of eighteen hundred and eighty, unless a larger number is needed to produce articles to be supplied to state and county institutions, as provided in section thirteen of said chapter. If said classification does not give the number employed in any industry in the state, the limit to the number who may be so employed in any institution in any industry shall be as provided by chapter two hundred and seventeen of the acts of the year eighteen hundred and eighty-three: *provided, however,* that fifty prisoners may be employed in the manufacture of brushes at the house of correction at Cambridge, upon the public account system, so called.

SECTION 2. This act shall take effect on the first day of January in the year eighteen hundred and ninety-two. [Approved June 5, 1891.]

Besides the preparation of its Annual Report, the Bureau, during the year, has collected information relating to the manufacture of clothing in tenement houses and under the contract system, so-called, a summary of which was communicated to His Excellency the Governor, by him transmitted to the legislature, and printed as House Document No. 255.

Apart from the investigations conducted each year the public use of this Department as a bureau of statistical information constantly increases. Inquiries as to social conditions and industrial affairs, such as may be answered by comparative

statistics, reach this office continually by mail and otherwise. As the usefulness of the Bureau is enhanced by its ability to supply such information, these inquiries are always replied to as fully as our resources permit.

The Bureau now possesses, through its exchanges or by purchase, a valuable library of statistical documents, with reports on the condition of labor in America and abroad, and covering a wide range of related subjects. These are always open to consultation by any person desiring to use them, and, in order that they may be practically available, a complete card catalogue of the entire library, by subjects, is in course of preparation.

The faithfulness and efficiency of the clerical force have materially contributed to the completeness of the present report. Few persons are aware of the painstaking care demanded in the preparation of statistical documents, or realize the multiplicity of detail involved in a report which requires extended revision to ensure accuracy, or which embodies in its presentations numerous mathematical computations, similar, for instance, to the Part relating to Net Profits contained in this volume.

In all this work, as in previous years, the experience and ability of Mr. Charles F. Pidgin, Chief Clerk, have been especially valuable, and to him my thanks are due, and also to Mr. Frank H. Drown, Second Clerk, and to the members of the staff generally.

H. G. W.



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PART I.

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**LABOR LAWS OF MASSACHUSETTS.**

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## PART I.

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# LABOR LAWS OF MASSACHUSETTS.

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The labor legislation of Massachusetts exceeds in volume that of any other State. While in many cases it has been based upon English precedents it is in turn serving as a model for similar enactments elsewhere, and the Bureau is constantly called upon to supply copies of our statutes relating to industrial subjects. The need of a compendium of all our laws that directly affect the interests of wage-workers is also manifested in the demand from our own citizens for information respecting them continually addressed to this office.

The Chapters of the Public Statutes, published in 1882, which relate to the employment of women and children, to the general inspection of factories, and to other important labor matters have been variously amended and revised since that date, so that a careful search through the blue books is required to ascertain the present provisions of law.

This compilation therefore is intended to bring together in compact form all statutes now in force relating to labor. The plan of presentation is first, chronological, beginning with the Public Statutes, and following with the enactments of subsequent years; and second, topical, the subjects being arranged alphabetically with references to the statutes bearing upon them.

Wherever practicable, subsequent amendments have been incorporated in the draught of the original law here presented, and, in such cases, the particular Act by which the amendment was made has not been included, but simply referred to by chapter and date. In conclusion a brief recapitulation by topics points out the change in the status of the wage-worker which has been effected by these enactments.

## PUBLIC STATUTES.

## CHAPTER 48.

OF THE EMPLOYMENT OF CHILDREN, AND REGULATIONS  
RESPECTING THEM.

[Sections 1 to 6 inclusive repealed by Chap. 348, Acts of 1888.  
Section 7 repealed by Chap. 433, Acts of 1887.]

## SECTION

8. Children under fifteen years not to be employed in circus, etc. Penalties.  
Proviso as to education of children in music, etc.

Children under fifteen years not to be employed in circus, etc. Penalties. Proviso as to education of children in music, etc. 1877, 172.

Proviso.

License not to be granted for public show in which children under fifteen years are employed. 1874, 279. 1880, 88.

## SECTION

9. License not to be granted to public show in which children under fifteen years are employed.

SECTION 8. Any person who employs or exhibits, or who sells, apprentices, or gives away for the purpose of employing or exhibiting, a child under fifteen years of age, in dancing, playing on musical instruments, singing, walking on a wire or rope, or riding or performing as a gymnast, contortionist, or acrobat, in any circus or theatrical exhibition, or in any public place whatsoever, or who causes, procures, or encourages any such child to engage therein, shall be punished by fine not exceeding two hundred dollars, or by imprisonment in the county jail not exceeding six months: *provided*, that nothing in this section shall be construed to prevent the education of children in vocal and instrumental music, or their employment as musicians in any church, chapel, or school, or school exhibition, or to prevent their taking part in any concert or musical exhibition on the special written permission of the mayor and aldermen of a city or of the selectmen of a town.

SECT. 9. No license shall be granted for a theatrical exhibition or public show in which children under fifteen years of age are employed as acrobats, contortionists, or in any feats of gymnastics or equestrianism, or in which such children belonging to the public schools are employed, or allowed to take part as performers on the stage in any capacity, or where, in the opinion of the board authorized to grant licenses, such children are employed in such a manner as to corrupt their morals or impair their physical health; but nothing herein contained shall prevent the giving of special permission as provided by the preceding section.

## CHAPTER 74.

## OF THE EMPLOYMENT OF LABOR.

## SECTION

1. Persons employed in factories to receive forfeiture, if discharged without notice, when, etc.
2. Penalty for intimidating laborers, etc.
3. Employers of labor not to contract for exemption from liability for injuries.

## SECTION

4. Minors under eighteen and women not to be employed in manufacturing establishments more than ten hours a day, except, etc.
5. Penalty for violation of preceding section.

SECTION 1. Any person or corporation engaged in manufacturing, which requires from persons in his or its employ, under penalty of forfeiture of a part of the wages earned by them, a notice of intention to leave such employ, shall be liable to the payment of a like forfeiture if he or it discharges without similar notice a person in such employ except for incapacity or misconduct, unless in case of a general suspension of labor in his or its shop or factory.

Persons employed in factories to receive forfeiture, if discharged without notice, when, etc.  
1875, 211, § 1.

SECT. 2. Whoever by intimidation or force prevents or seeks to prevent a person from entering into or continuing in the employment of a person or corporation shall be punished by fine of not more than one hundred dollars.

Penalty for intimidating laborers, etc.  
1875, 211, § 2.

SECT. 3. No person or corporation shall, by a special contract with persons in his or its employ, exempt himself or itself from any liability which he or it might otherwise be under to such persons for injuries suffered by them in their employment and which result from the employer's own negligence or from the negligence of other persons in his or its employ.

Employers of labor not to contract for exemption from liability for injuries.  
1877, 101, § 1.

SECT. 4. [*As amended by Chap. 157, Acts of 1883; Chap. 275, Acts of 1884; and by Chap. 280, Acts of 1887.*] No minor under eighteen years of age and no woman shall be employed in laboring in any manufacturing or mechanical establishment more than ten hours in any one day, except as hereinafter provided in this section, or when a different apportionment of the hours of labor is made for the sole purpose of making a shorter day's work for one day of the week; and in no case shall the hours of labor exceed sixty in a week. Every employer shall post in a conspicuous place in every room where such persons are employed a printed notice stating the number of hours' work required of them on each day of the week, the hours of commencing and stopping such work, and the hours when the time or times allowed for dinner or for other meals begins and ends, or in the case of establishments exempted from the provisions of chapter two hundred and fifteen of the

Minors under eighteen and women not to be employed in manufacturing establishments more than ten hours a day, except, etc.  
1874, 221, § 1.  
1880, 194, § 1.

Notice to be posted, in every room, of number of hours of labor required.



acts of the year eighteen hundred and eighty-seven, the time, if any, allowed for dinner and for other meals; the printed form of such notice shall be furnished by the chief of the district police, and shall be approved by the attorney-general; and the employment of any such person for a longer time in any day than that so stated shall be deemed a violation of this section, unless it appears that such employment is to make up for time lost on some previous day of the same week in consequence of the stopping of machinery upon which such person was employed or dependent for employment. But no stopping of machinery for a shorter continuous time than thirty minutes shall authorize such over time employment, nor shall any such stopping authorize such employment unless or until a written report of the day and hour of its occurrence, with its duration, is sent to the chief of the district police or to the inspector of factories for the district. Any person who makes a false report of such stopping of machinery shall be punished by fine of not less than fifty nor more than one hundred dollars. If any minor under eighteen years of age, or any woman, shall, without the orders, consent or knowledge of the employer, or of any superintendent, overseer, or other agent of the employer, labor in a manufacturing or mechanical establishment during any part of any time allowed for dinner or for other meals in such establishment, according to the notice above mentioned, and if a copy of such notice was posted in a conspicuous place in the room where such labor took place, together with a rule of the establishment forbidding such minor or woman to labor during such time, then neither the employer, nor any superintendent, overseer, or other agent of the employer, shall be held responsible for such employment.

Penalty for making false report.

Penalty for violation of preceding section.  
1874, 221, § 2.  
1879, 207.  
1880, 194, § 2.

SECT. 5. Whoever, either for himself, or as superintendent, overseer, or other agent of another, employs or has in his employment any person in violation of the provisions of the preceding section, and every parent or guardian who permits any minor to be so employed, shall be punished by fine of not less than fifty nor more than one hundred dollars for each offence. Said penalty shall extend to corporations. A certificate of the age of a minor made by him and by his parent or guardian at the time of his employment in a manufacturing establishment shall be conclusive evidence of his age upon any trial for a violation of the preceding section.

## CHAPTER 98.

## OF THE OBSERVANCE OF THE LORD'S DAY.

*[The following Section, being Section 2 of the above Chapter, as amended by Chap. 391 of the Acts of 1887, regulates labor upon the Lord's Day. The Chapter defines the Lord's Day as including "the time from midnight to midnight."]*

Whoever on the Lord's Day keeps open his shop, warehouse, or workhouse, or does any manner of labor, business, or work, except works of necessity and charity, . . . shall be punished by a fine not exceeding fifty dollars for each offence. But nothing in this section shall be held to prohibit the manufacture and distribution of steam, gas or electricity for illuminating purposes, heat or motive power, nor the distribution of water for fire or domestic purposes, nor the use of the telegraph or the telephone, nor the retail sale of drugs and medicines, nor articles ordered by the prescription of a physician, nor mechanical appliances used by physicians or surgeons, nor the letting of horses and carriages, nor the letting of yachts and boats, nor the running of steam ferryboats on established routes, of street railway cars, nor the preparation, printing and publishing of newspapers, nor the sale and delivery of newspapers, nor the retail sale and delivery of milk, nor the transportation of milk, nor the making of butter and cheese, nor the keeping open of public bath houses, nor the making or selling by bakers or their employees of bread or other food usually dealt in by them before ten of the clock in the morning and between the hours of four of the clock and half-past six of the clock in the evening.

## CHAPTER 103.

## OF DISTRICT AND OTHER POLICE OFFICERS.

*[The following Sections of this Chapter directly relate to the interests of wage-workers.]*

## SECTION

9. Two members [of the district police] to act as inspectors of factories, etc.

## SECTION

10. Duties of such inspectors.

11. Chief to make annual report, etc.

SECTION 9. The governor shall appoint two or more of the district police to act as inspectors of factories and public buildings. In a district where a district police officer is appointed to act as such inspector, the governor may appoint an additional

Two members to act as inspectors of factories, etc. 1879, 305, § 12. 1880, 178.

district police officer; but the whole district police force shall not exceed sixteen\* men. [See also Chap. 113, Acts of 1888.]

Duties of such inspectors.  
1877, 214, § 7.  
1879, 306, § 12.  
1880, 181.  
1881, 137.  
1882, 266, § 6.

SECT. 10. [As amended by Chap. 218, Acts of 1887.] Such inspectors shall enforce the provisions of sections thirteen to twenty-two, inclusive, of chapter one hundred and four, except as therein specified, and the various provisions of law relating to the employment of women and minors in manufacturing, mechanical or mercantile establishments, and the employment of children, young persons or women in factories or workshops, and the ventilation of factories or workshops, and the securing of proper sanitary provisions in factories or workshops; and for this purpose said inspectors may enter all buildings used for public or manufacturing purposes, or for factories or workshops, examine the methods of protection from accident, the means of escape from fire, the sanitary provisions and the means of ventilation, and may make investigations as to the employment of children, young persons and women.

Chief to make annual report, etc.  
1877, 214, § 6.

SECT. 11. The chief of the district police shall report in print to the governor, on or before the first day of January of each year, in relation to factories and public buildings, with such remarks, suggestions, and recommendations as he may deem necessary.

## CHAPTER 104.

### OF THE INSPECTION OF BUILDINGS.

[As amended by Chaps. 208 and 266, Acts of 1882. See also Chaps. 103 and 173, Acts of 1887, and Chaps. 316 and 426, Acts of 1888.]

#### SECTION

- 1 to 12. (These sections contain provisions relating to the enactment of by-laws for the prevention of fire, and the construction of buildings in general, and do not particularly relate to the interests of wage-workers.)
13. Rules for belting, etc., in factories, and for cleaning machinery.
14. for hatchways, etc.

#### SECTION

- (Sections 15 to 20 inclusive, repealed by Chap. 426, Acts of 1888.)
21. Rules for explosive compounds.
22. Penalty.
23. Authority of inspectors not to extend to the city of Boston.
24. Inspectors failing to perform duties to be discharged.

Rules for belting, etc., in factories, and for cleaning machinery.  
1877, 214, § 1.

SECTION 13. The belting, shafting, gearing, and drums of all factories, when so placed as to be, in the opinion of the

\* Increased to 20 by Chap. 131, Acts of 1885, to 22 by Chap. 256, Acts of 1887, and to 23 by Chap. 389, Acts of 1888. Divided into two departments by Chap. 113, Acts of 1888 (which see) and 10 additional members of the inspection department authorized by Section 13, Chap. 426, Acts of 1888 (which see).

inspectors mentioned in section nine of chapter one hundred and three, dangerous to persons employed therein while engaged in their ordinary duties, shall be as far as practicable securely guarded. No machinery, other than steam-engines, in a factory, shall be cleaned while running, if objected to in writing by one of said inspectors. All factories shall be well ventilated and kept clean.

SECT. 14. The openings of all hoistways, hatchways, elevators, and well-holes, upon every floor of a factory or mercantile or public building, shall be protected by good and sufficient trap-doors, or self-closing hatches and safety-catches, or such other safeguards as said inspectors direct; and all due diligence shall be used to keep such trap-doors closed at all times, except when in actual use by the occupant of the building having the use and control of the same. All elevator cabs or cars, whether used for freight or passengers, shall be provided with some suitable mechanical device, to be approved by the said inspectors, whereby the cabs or cars will be securely held in the event of accident to the shipper rope, or hoisting machinery, or from any similar cause.

Rules for hatchways, etc.  
1877, 214, § 2.  
1882, 208, § 1.

SECT. 21. No explosive or inflammable compound shall be used in any factory in such place or manner as to obstruct or render hazardous the egress of operatives in case of fire.

for explosive compounds.  
1881, 137.

SECT. 22. Any person or corporation being the owner, lessee or occupant of a manufacturing establishment, factory or workshop, or owning or controlling the use of any building or room mentioned in section twenty,\* shall, for the violation of any provision of sections thirteen to twenty-one \* inclusive, be punished by a fine of not less than fifty nor more than five hundred dollars, and shall also be liable for all damages suffered by an employee by reason of such violation; but no criminal prosecution shall be made for such violation until four weeks after notice in writing by an inspector of factories and public buildings of any changes necessary to be made to comply with the provisions of said sections has been sent by mail or delivered to such person or corporation, nor then, if in the mean time such changes have been made in accordance with such notification. Notice to one member of a firm, or to the clerk or treasurer of a corporation owning, leasing, occupying or controlling, as aforesaid, shall be deemed a sufficient notice under this section to all the members of such firm or to such corporation. Nothing in

Penalties.  
1882, 208, § 3.

Prosecution not to be made until four weeks after notice of changes to be made.

\* Sections 15 to 20 inclusive were repealed by Chap. 426, Acts of 1883.

Action for damages not prohibited.

Authority of inspectors not to extend to certain cities. 1882, 266, § 4.

Inspectors failing to perform duties, to be discharged. 1882, 266, § 5.

this section shall be so construed as to prohibit a person injured from bringing an action to recover damages for his injuries.

SECT. 23. [*As amended by Chap. 276, Acts of 1887.*] The authority of the inspectors mentioned in section thirteen of this chapter to enforce the provisions of sections fourteen to twenty-two \* inclusive, shall not extend to the city of Boston.

SECT. 24. A district police officer detailed to perform the duties required by sections thirteen to twenty-one inclusive who fails to perform such duties faithfully shall be immediately discharged from his office.

## CHAPTER 106.

### FORMATION OF CO-OPERATIVE CORPORATIONS.

[*The following Sections of this Chapter relate to the above subject.*]

Corporations for co-operative trade, etc. 1870, 224, § 3. 1879, 210.

Profits of co-operative associations, how distributed. 1870, 224, § 51.

SECTION 9. For the purpose of co-operation in carrying on any business authorized in the two preceding sections,† and of co-operative trade, seven or more persons may associate themselves, with a capital of not less than one thousand nor more than one hundred thousand dollars.

SECT. 72. Every corporation organized for the purposes set forth in section nine shall distribute its profits or earnings among its workmen, purchasers, and stockholders, at such times and in such manner as shall be prescribed by its by-laws, and as often at least as once in twelve months; but no distribution shall be made until at least ten per cent of the net profits has been appropriated for a contingent or sinking fund, until there has accumulated a sum equal to thirty per cent in excess of its capital stock.

No person to hold more than one thousand dollars of stock. 1870, 224, § 52.

SECT. 73. No person shall hold shares in any co-operative association to an amount exceeding one thousand dollars at their par value, nor shall any stockholder be entitled to more than one vote upon any subject.

\* Sections 15 to 20 inclusive were repealed by Chap. 426, Acts of 1888.

† Namely, mechanical, mining, or manufacturing (except distilling and the manufacture of intoxicating liquors), cutting, storing, and selling ice, agricultural, horticultural, or quarrying business, and printing and publishing newspapers, periodicals, books, or engravings.

## CHAPTER 112.

## SECTIONS 143-147. REMEDY FOR LABOR, ETC., FURNISHED FOR THE CONSTRUCTION OF A RAILROAD.

## SECTION

143. Action against owner for labor and materials.

144. Contractor not to have right of action.

## SECTION

145. Statement of amount of debt for labor.

146. of amount for materials.

147. Action, when to be commenced.

SECTION 143. A person to whom a debt is due for labor performed or for materials furnished and actually used in constructing a railroad under a contract with a person other than the owner thereof, having authority from or rightfully acting for such owner in furnishing such labor or materials, shall have a right of action against such owner to recover such debt with costs, except as is provided in the four following sections.

Action against owner of railroad for labor and materials.  
1873, 353, § 1.  
115 Mass. 580.  
121 Mass. 510.

SECT. 144. No such person who has contracted to construct the whole or a specified part of such railroad shall have such right of action.

Contractor not to have such action.  
1873, 353, § 2.

SECT. 145. No such person shall have such right of action for labor performed, unless, within thirty days after ceasing to perform it, he files in the office of the clerk of a city or town in which any of said labor was performed a written statement, under his oath, of the amount of the debt so due him, and of the name of the person or persons for whom and by whose employment the labor was performed. Such right of action shall not be lost by a mistake in stating the amount due; but the claimant shall not recover as damages a larger amount than is named in said statement as due him, with interest thereon.

Statement of amount of debt for labor to be filed.  
1873, 353, § 3.  
127 Mass. 101.

SECT. 146. No such person shall have such right of action for materials furnished, unless, before beginning to furnish the same, he files in the office of the clerk of the city or town in which any of the materials were furnished a written notice of his intention to claim such right, in the manner provided for filing the statement named in the preceding section.

No action for materials, unless, etc.  
1873, 353, § 4.

SECT. 147. No such action shall be maintained, unless commenced within sixty days after the plaintiff ceased to perform such labor or to furnish such materials.

127 Mass. 101.

Actions to be commenced within sixty days.  
1873, 353, § 5.

## CHAPTER 183.

## OF THE TRUSTEE PROCESS.

*[The following Sections of this Chapter directly relate to the interests of wage-workers.]*

## SECTION

25. Money, etc., due to defendant may be attached before it is payable, if it is due absolutely.
29. Wages of wife or minor children of defendant not liable to trustee process.
30. When wages are attached, certain amount to be exempt.
31. defendant may avoid certain costs by making tender or offer of judgment, or by suffering default.

## SECTION

32. Penalty for causing wages, which are exempt from attachment, to be attached.
39. Assignment of future earnings not to be valid against trustee process unless recorded.
87. Plaintiff to recover no costs in certain cases where wages are attached.
88. nor in any case in which the damages recovered do not exceed ten dollars.

Money, etc., due to defendant may be attached before it is payable, if it is due absolutely.  
G. S. 142, § 24.  
14 Pick. 81.  
99 Mass. 550.

SECTION 25. Any money or other thing due to the defendant may be attached as herein mentioned before it has become payable, if it is due absolutely and without any contingency; but the trustee shall not be compelled to pay or deliver it before the time appointed by the contract.

Wages of wife or minor children of defendant not liable to trustee process.  
1868, 95.

SECT. 29. No person shall be adjudged a trustee by reason of any money or credits which are due for the wages of the personal labor or services of the wife or minor children of the defendant.

When wages are attached, certain amount to be exempt.  
G. S. 142, § 29.  
1868, 95.  
1878, 260, § 3.  
14 Gray, 487.  
5 Allen, 210.  
6 Allen, 572.  
7 Allen, 264.  
9 Allen, 106.

SECT. 30. When wages for the personal labor and services of a defendant are attached for a debt or demand other than for necessities furnished to him or to his family, there shall be reserved in the hands of the trustee a sum not exceeding twenty dollars, which shall be exempt from such attachment; and when such wages are attached on a demand for such necessities, there shall be so reserved a sum not exceeding ten dollars.

When wages are attached, defendant may avoid certain costs by making tender or offer of judgment, or by suffering default.  
1878, 260, §§ 4, 5.

SECT. 31. When wages for personal labor or services are attached, the defendant may at any time before the entry of the writ tender to the plaintiff or to his attorney the whole amount due and recoverable in the action, with the fees of the officer for serving the writ. When such tender is made, no costs, other than such fees of the officer, shall be recovered by the plaintiff; and when the defendant is defaulted without an appearance, or when he files on the return day of the writ an offer of judgment in accordance with section sixty-five of chapter one hundred and sixty-seven, and the plaintiff accepts

such offer or fails to secure more than the amount thereof and of the interest thereon from its date, no costs shall be recovered by the plaintiff other than such officer's fees and the fees of the clerk.

SECT. 32. Whoever wilfully causes, or aids and abets in causing, wages for personal services, which are exempt from attachment, to be attached by the trustee process for the purpose of unlawfully hindering or delaying the payment of such wages to the person to whom they belong, shall, on complaint of the person injured thereby, or of the guardian or other person having the lawful custody of any such person who is incompetent to act, be punished by fine not exceeding fifty dollars, to be paid to the person so injured.

Penalty for causing wages, which are exempt from attachment, to be attached. 1878, 280, § 2.

SECT. 39. No assignment of future earnings shall be valid against a trustee process, unless, before the service of such process upon the alleged trustee, the assignment has been recorded in the office of the clerk of the city or town where the assignor resides at the time of such record; and the provisions of section four of chapter one hundred and ninety-two \* shall apply to such assignments. Such record shall not affect the rights or liability of the person or corporation from whom such earnings are due, otherwise than as is provided in this section.

Assignment of future earnings not to be valid against trustee process unless recorded. 1865, 43, §§ 2, 3. 102 Mass. 233, 235. 110 Mass. 204. 115 Mass. 165. 120 Mass. 94. 121 Mass. 167, 431.

123 Mass. 353.

124 Mass. 162.

126 Mass. 117.

SECT. 87. If the wages for the personal labor and services of a person are attached by the trustee process on a claim other than for necessities, and the plaintiff does not recover a sum amounting to five dollars as debt, he shall recover no costs of suit.

Plaintiff to recover no costs in certain cases where wages are attached. G. S. 142, § 74.

SECT. 88. In any action brought under the trustee process in which the damages assessed do not exceed in amount the sum of ten dollars, exclusive of all costs which have accrued in any former action, the plaintiff shall recover no costs; but this section shall not apply to any action brought upon a cause of action which existed on the first day of July in the year eighteen hundred and eighty-one.

nor in any case in which the damages recovered do not exceed ten dollars. 1881, 216.

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\* Prescribing the duties of town and city clerks as to records, and fixing their fees.



## CHAPTER 191.

## OF LIENS ON BUILDINGS AND LAND.

## SECTION

1. Certain mechanics and others to have liens on buildings and land for amount due them for labor and materials.
2. Special provision for case of labor and materials furnished on an entire contract.
3. Lien for materials not to attach in certain cases unless notice is given to owner of land.
4. No lien whatever to attach if owner of land gives notice that he will not be responsible.
5. Lien not to be valid against certain mortgages.
6. to be dissolved, unless statement is, within thirty days, filed in registry of deeds.
7. Duties of register in relation to statements filed in his office.
8. Inaccuracy in statement not to invalidate lien, unless, etc.
9. Suit to enforce lien must be commenced within ninety days.
10. Lien may be enforced by petition to superior court.
11. or in certain cases by petition to police court, etc.
12. Petition may be inserted in a writ.
13. Form of petition.
14. Indorsement of petition.
15. Who may join in petition.
16. Notice of petition to be given to owner of building and others.
17. Same subject.
18. Same subject.
19. All persons claiming lien to be allowed to present their claims and to contest claims of others.
20. Amendments.
21. When questions of fact may be tried by jury.

## SECTION

22. Court to determine amount due to each creditor.
23. Provision for case where owner prevents the other party from performing contract in full.
24. If lien is established sale of premises to be ordered.
25. Part only may be sold in certain cases.
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33. Rights of party who attaches after the filing of the statement.
34. of party who attaches between the filings of two statements.
35. of attaching creditors and of claimants of liens as between themselves.
36. Provision for case where person for whom the work was done, etc., has less than a fee simple in the land.
37. Lien may be enforced against heirs or assigns of original owner of the land.
38. or by executor or administrator of petitioner.
39. Suit commenced by one creditor may in certain cases be prosecuted by another.
40. Same subject.
41. Costs to be in discretion of court.
42. Lien may be dissolved by bond.
43. Bond to contain description of property, and to be recorded, etc.
44. Clerk of court to certify to register when lien is dissolved.
45. Lien to be discharged of record when debt is paid.
46. Action at law not barred.

Certain mechanics and others to have lien on buildings and land for amount due them for labor and materials.  
 G. S. 150, § 1.  
 1 Gray, 297, 576.  
 3 Gray, 233.  
 7 Gray, 429.  
 13 Gray, 311, 414.  
 3 Allen, 307.

SECTION 1. Any person to whom a debt is due for labor performed or furnished or for materials furnished and actually used in the erection, alteration, or repair of a building or structure upon real estate, by virtue of an agreement with or by consent of the owner of such building or structure or of any person having authority from or rightfully acting for such owner in procuring or furnishing such labor or materials, shall have a lien upon such building or structure and upon the interest of the owner thereof in the lot of land upon which the same is situated, to secure the payment of the debt so due to him and

of the costs which may arise in enforcing such lien, except as is hereinafter provided.

101 Mass. 435.	106 Mass. 228, 528, 531.	5 Allen, 406, 540.	11 Allen, 444.
116 Mass. 429.	116 Mass. 374.	112 Mass. 18, 309.	114 Mass. 476.
120 Mass. 58.	121 Mass. 229, 476.	117 Mass. 167, 176.	119 Mass. 459.
126 Mass. 148.		123 Mass. 45, 570.	124 Mass. 404.

SECT. 2. When the agreement mentioned in the preceding section is for labor performed or furnished and for materials furnished upon an entire contract and for an entire price, a lien for the labor alone may be enforced, if it can be distinctly shown what such labor was worth, but in no case shall such lien be enforced for a sum greater than the price agreed upon for the entire contract.

Special provision for case of labor and materials furnished on an entire contract.  
1872, 318, § 1.  
5 Allen, 403.  
7 Allen, 412.

124 Mass. 516.	8 Allen, 543, 573.	11 Allen, 152.
	126 Mass. 169, 309.	128 Mass. 108.

SECT. 3. No lien shall attach for materials furnished unless the person furnishing the same before so doing gives notice in writing to the owner of the property to be affected by the lien, if such owner is not the purchaser of such materials, that he intends to claim such lien.

Lien for materials not to attach in certain cases unless notice is given to owner of land.

1872, 318, § 3.	2 Allen, 424.	G. S. 150, § 2.
		126 Mass. 274.

SECT. 4. The owner of a building or structure in process of erection or of being altered or repaired, if he is a person other than the party by whom or in whose behalf a contract for labor and materials has been made, may prevent the attaching of a lien for labor not at the time performed, or for materials not then furnished, by giving notice in writing to the person performing or furnishing such labor, or furnishing such materials, that he will not be responsible therefor.

No lien to attach if owner of land gives notice that he will not be responsible.  
G. S. 150, § 4.  
5 Cush. 119.  
105 Mass. 345.

SECT. 5. The lien shall not avail or be of force against a mortgage actually existing and duly recorded prior to the date of the contract under which the lien is claimed.

Lien not to be valid against certain mortgages.

G. S. 150, § 3.	103 Mass. 470.	109 Mass. 411.
117 Mass. 167, 176.	120 Mass. 408.	121 Mass. 418.

SECT. 6. The lien shall be dissolved unless the person desiring to avail himself thereof, within thirty days after he ceases to labor on or to furnish labor or materials for the building or structure, files in the registry of deeds for the county or district in which the same is situated a statement of a just and true account of the amount due him, with all just credits given; a description of the property intended to be covered by the lien, sufficiently accurate for identification; and the name of the owner or owners of such property, if known. If a lien is claimed only for labor performed or furnished under an entire contract which includes both labor and materials at an entire price, the contract price, the number of days of labor performed or furnished, and the value of the same, shall also be stated.

to be dissolved, unless statement is, within thirty days, filed in registry of deeds.  
G. S. 150, § 5.  
1872, 318, § 2.  
1877, 93, § 1.  
7 Gray, 429.  
8 Allen, 590.  
109 Mass. 395.  
110 Mass. 116.  
116 Mass. 375.  
117 Mass. 179.  
119 Mass. 459.  
120 Mass. 58, 510.  
124 Mass. 404, 516, 549.  
126 Mass. 276.  
128 Mass. 534.

The statement shall be subscribed and sworn to by the person claiming the lien, or by some one in his behalf.

Duties of register in relation to statements filed in his office.  
G. S. 150, § 5.  
1877, 98, § 2.

SECT. 7. All statements filed under the preceding section shall remain in the custody of the register for public inspection, and the register shall record them in a book to be kept for the purpose, but shall not be required to record the items of the account contained in the statement further than to record the total amount claimed to be due.

Inaccuracy in statement not to invalidate lien, unless, etc.  
G. S. 150, § 6.  
6 Gray, 531.  
7 Gray, 429.  
13 Gray, 100.  
2 Allen, 424.  
3 Allen, 464.

SECT. 8. The validity of the lien shall not be affected by any inaccuracy in the statement relating to the property to be covered by it, if such property can be reasonably recognized from the description, nor by any inaccuracy in stating the amount due for labor or materials, unless it appears that the person filing the statement has wilfully and knowingly claimed more than is his due.

8 Allen, 590.

108 Mass. 103.

Suit to enforce lien must be commenced within ninety days.  
G. S. 150, § 7.

SECT. 9. Unless a suit for enforcing the lien is commenced within ninety days after the person desiring to avail himself thereof ceases to labor on or to furnish labor or materials for the building or structure, the lien shall be dissolved. 4 Cush. 532.

Lien may be enforced by petition to superior court.  
G. S. 150, § 8.

SECT. 10. The lien may be enforced by petition to the superior court in the county where the building or structure is situated. The petition may be filed in term time, or in the clerk's office in vacation, and the date of the filing shall be deemed the commencement of the suit.

or in certain cases by petition to police court, etc.  
1879, 113, § 1.

SECT. 11. When the amount of the claim does not exceed three hundred dollars, the lien may be enforced by petition to a police, district, or municipal court, or trial justice; and such courts and justices shall have like power and authority within their jurisdiction as are conferred by this chapter upon the superior court, and the parties shall have like rights of appeal as exist in other civil cases.

Petition may be inserted in a writ.

SECT. 12. The petition may be inserted in a writ of original summons, and be served, returned, and entered as in other civil cases.

G. S. 150, § 10.

9 Allen, 575.

Form of petition.  
G. S. 150, § 11.  
11 Cush. 308.  
7 Gray, 429.  
124 Mass. 404,  
549.

SECT. 13. Whether filed as a petition or inserted in a summons, the petition shall contain a brief statement of the contract on which it is founded and of the amount due thereon, with a description of the premises subject to the lien and all other material facts and circumstances, and shall pray that the premises may be sold and the proceeds of the sale applied to the discharge of the demand.

Indorsement of petition.  
G. S. 150, § 42.

SECT. 14. All the regulations concerning the indorsement of original writs shall apply to the indorsement of petitions filed under this chapter.

SECT. 15. Any number of persons who have actually performed labor on or furnished labor or materials for one or more buildings or structures upon different lots of land, if the labor was performed for the same owner, contractor, or other person, may join in the same petition for their respective liens; and the same proceedings shall be had in regard to the rights of each petitioner, and the respondent may defend as to each petitioner, as if he had severally petitioned for his individual lien.

Who may join  
in petition.  
G. S. 150, § 13.

SECT. 16. The court in which the petition is entered, or the clerk thereof in vacation, shall order notice to be given to the owner of the building or structure, that he may appear and answer the petition at a certain day in the same or the next term, by serving him with an attested copy of the petition, and of the order thereon, fourteen days at least before the time assigned for the hearing; and the court, or the clerk thereof in vacation, shall also order notice of the filing of the petition to be given to the debtor and to all other creditors who have a lien of the same kind upon the same estate, by serving them in like manner with a copy of the last-mentioned order. If the petition is entered in a police, district, or municipal court, or before a trial justice, the day for the appearance and answer shall be fixed at not more than sixty days from the day of entry.

Notice of petition to be given to owner of building and others.  
1871, 78.  
5 Cush. 119.  
118 Mass. 565.

SECT. 17. If it appears to the court or to the clerk thereof in vacation that any of the parties entitled to notice are absent or that it is probable that they cannot be found to be served with the notice, the court or the clerk thereof in vacation may, instead of or in addition to the personal notice before mentioned, order notice to be given to all persons interested by publishing in some newspaper the substance of the petition and order, assigning the time and place for a hearing, or may order such other notice to be given as may under the circumstances of the case be considered most proper and effectual.

Same subject.  
1880, 216.  
103 Mass. 227.

SECT. 18. If at the time assigned for the hearing it appears that any of the persons interested have not had sufficient notice of the suit, the court may order further notice to be given to them in such manner as may be considered most proper and effectual.

Same subject.  
G. S. 150, § 14.  
5 Cush. 119.

SECT. 19. At the time assigned for the hearing, or within such further time as the court allows for the purpose, every creditor having a lien under this chapter upon the same property may appear and prove his claim, and the owner and each of the creditors may contest the several claims of every other creditor, and the court shall hear and determine all claims in a

All persons claiming lien to be allowed to present their claims and to contest claims of others.  
G. S. 150, § 17.

summary manner, either with or without a jury, as the case may require.

Amendments.  
G. S. 150, § 12.

SECT. 20. The court may at any time allow either party to amend his pleadings as in actions at common law.

When questions  
of fact may be  
tried by jury.  
G. S. 150, § 18.  
110 Mass. 340.

SECT. 21. Every material question of fact arising in the case, if before the superior court, shall be submitted to a jury, if such submission is required by either party or is thought proper by the court; and the trial shall be had upon a question stated, upon an issue framed, or otherwise, as the court may order.

Court to deter-  
mine amount  
to each  
creditor.  
G. S. 150, § 19.

SECT. 22. The court shall ascertain and determine the amount due to each creditor who has a lien under this chapter upon the property in question, and every such claim due absolutely and without any condition, although not then payable, shall be allowed, with a rebate of interest to the time when it would become payable.

Provision for  
case where  
owner prevents  
the other party  
from perform-  
ing contract in  
full.  
G. S. 150, § 20.

SECT. 23. When the owner fails to perform his part of the contract, and by reason of such failure the other party is without his own default prevented from completely performing his part thereof, he shall be entitled to a reasonable compensation for as much as he has performed, in proportion to the price stipulated for the whole, and the court shall adjust his claim accordingly.

If lien is estab-  
lished, sale of  
premises to be  
ordered.  
G. S. 150, § 21.

SECT. 24. If the lien is established in favor of any of the creditors whose claims are presented, the court shall order a sale of the property to be made by an officer authorized to serve civil process between the parties.

Part only may  
be sold in cer-  
tain cases.  
G. S. 150, § 22.

SECT. 25. If part of the property can be separated from the residue and sold without damage to the whole, and if the value thereof is sufficient to satisfy all debts proved in the case, the court may order a sale of such part, if such sale appears to be for the interest of all parties concerned.

Notice of sale.  
G. S. 150, § 23.

SECT. 26. The officer who makes the sale shall, unless the court orders a different notice to be given, give notice of the time and place of sale in the manner prescribed in relation to sales of real estate on execution.

Right of re-  
demption.  
G. S. 150, § 24.

SECT. 27. Any interest in real estate sold under this chapter may be redeemed in the manner provided in relation to sales of real estate on execution.

Distribution of  
proceeds of sale.  
G. S. 150, § 25.  
116 Mass. 196.

SECT. 28. If all the claims against the property covered by the lien are ascertained at the time of ordering the sale, the court may order the officer to pay over and distribute the proceeds of the sale, after deducting all lawful charges and expenses, to and among the several creditors to the amount of

their respective debts, if there is sufficient therefor; or, if there is not sufficient, then to divide and distribute the same among the creditors in proportion to the amount due to each.

SECT. 29. If all the claims are not ascertained when the sale is ordered, or if for any other reason the court finds it necessary or proper to postpone the order of distribution, it may direct the officer to bring the proceeds of the sale into court there to be disposed of according to its decree; and if by reason of the claims of attaching creditors, or for any other cause, the whole cannot be conveniently distributed at once, the court may make successive orders of distribution, as the circumstances may require.

Same subject.  
G. S. 150, § 26.

SECT. 30. If there is a surplus of the proceeds of the sale after making all the payments before mentioned, it shall be forthwith paid over to the owner of the property; but such surplus, before it is so paid over, shall be liable to be attached or taken on execution in like manner as if it proceeded from a sale made by the officer on an execution.

Disposal of surplus.  
G. S. 150, § 27.

SECT. 31. If the interest of the owner in the building, structure, or land is under attachment when the statement of the account is filed, the attaching creditor shall be preferred to the extent of the value of the buildings and land as they were at the time when the labor was commenced or the materials furnished for which the lien is claimed; and the court shall ascertain by a jury or otherwise, as the case may require, what proportion of the proceeds of the sale shall be held subject to the attachment, as derived from the value of the property at such time.

Rights of party who attaches the land prior to the filing of the statement.  
G. S. 150, § 28.  
1861, 131.

SECT. 32. If the attaching creditor recovers judgment, he shall be entitled to receive on his execution the proportion of the proceeds held subject to his attachment, or as much thereof as may be necessary to satisfy his execution, and the residue of the proceeds shall be applied in the same manner as if there had been no such attachment.

Same subject.  
G. S. 150, § 29.

SECT. 33. If the interest of the owner of the property is attached after the filing of the statement, the proceeds of the sale, after discharging all prior liens and claims, shall be applied to satisfy the execution of the attaching creditor, in like manner as is provided in chapter one hundred and seventy-one for the case of two or more successive attachments or seizures in execution of a right of redemption.

Rights of party who attaches after the filing of the statement.  
G. S. 150, § 30.

SECT. 34. If an attachment is made after the filing of a statement, and if after the attachment another statement is filed, the creditor in the latter statement shall be entitled to be paid only out of the residue of the proceeds remaining after paying

Rights of party who attaches between the filings of two statements.  
G. S. 150, § 31.

all that is due on the demand a statement of which was filed before the attachment, and after satisfying the attaching creditors.

Rights of attaching creditors and of claimants of liens as between themselves.  
G. S. 150, § 32.

SECT. 35. When there are several attaching creditors, they shall as between themselves be entitled to be paid according to the order of their attachments, but when several creditors who are entitled to the lien provided for in this chapter have equal rights as between themselves, and the fund is insufficient to pay them in full, they shall share the fund equally in proportion to their respective debts.

Provision for case where person for whom the work was done, etc., has less than a fee simple in the land.  
G. S. 150, § 33.  
13 Met. 149.  
103 Mass. 470.

SECT. 36. If the person, for whom the work is done or the materials are furnished, has an estate for life or any other estate less than a fee simple in the land, or if the property is subject to a mortgage or other encumbrance, the lien before provided for shall bind such person's whole estate and interest in the property, and such estate or interest may be sold and applied to the discharge of his debt according to the provisions of this chapter.

Lien may be enforced against heirs or assigns of original owner of the land.  
G. S. 150, § 34.  
5 Cush. 119.

SECT. 37. If the person, for whom the work is done or the materials are furnished, dies or conveys away his estate or interest before the commencement of a suit for enforcing the lien, such suit may be commenced and prosecuted against his heirs or against the persons holding the estate or interest which he had in the premises at the time when the labor or materials were performed or furnished; or if a suit has been commenced in the lifetime of such person, it may be prosecuted against his executors, administrators, heirs, or assigns in like manner as if the estate or interest had been mortgaged to secure the debt.

or by executor or administrator of petitioner  
G. S. 150, § 35.

SECT. 38. If the creditor dies without having commenced such a suit, it may be commenced and prosecuted by his executor or administrator; or if he dies after having commenced a suit, it may be prosecuted by his executor or administrator as it might have been by the deceased if living.

Suit commenced by one creditor may in certain cases be prosecuted by another.  
G. S. 150, § 37.

SECT. 39. If it appears in any stage of the proceedings that the suit was commenced by the petitioning creditor before his right of action accrued or after it was barred, or if he becomes nonsuit, or fails to establish his claim, the suit may be prosecuted by any other creditor having such lien, in the same manner as if it had been originally commenced by him, if the circumstances of the case are such that he might then, or at any time after the commencement of the original suit, have commenced a like suit on his own claim.

SECT. 40. If the suit is commenced by the petitioning creditor before his right of action accrues, his claim may nevertheless be allowed, if the suit is carried on by any other creditor as provided in the preceding section; but he shall not in such case be entitled to costs, and he may be required to pay the costs incurred by the debtor, or a part thereof, as the court may deem reasonable.

Same subject.  
G. S. 150, § 88.

SECT. 41. The costs shall in all other respects be subject to the discretion of the court, and shall be paid from the proceeds of the sale, or by any of the parties in the suit, as justice and equity require.

Costs to be in discretion of court.  
G. S. 150, § 89.

SECT. 42. Any person having an interest in property upon which a lien has been claimed pursuant to the provisions of this chapter, may, at any time before final judgment in a suit brought to enforce such lien, release his interest in such property, or in any portion thereof, from such lien, by giving a bond to the party claiming the lien, with sufficient sureties to be approved in writing by such party or his attorney or by a master in chancery, and with condition to pay to such party, within thirty days after final judgment in such suit, a sum fixed as the value of the property or interest so released, or so much of such sum as may be necessary to satisfy any amount for which such property or interest may be found to be subject to such lien in such suit. If the parties interested do not agree as to the value of the property or interest to be released, such value may be fixed in the same manner and subject to the same provisions and regulations as are provided in sections one hundred and twenty-six and one hundred and twenty-seven of chapter one hundred and sixty-one for fixing the value of property released from attachment.

Lien may be dissolved by bond.  
1874, 321, §§ 1, 3.

SECT. 43. The bond referred to in the preceding section shall contain a description of the property or interest released, and the obligor shall cause it to be recorded within ten days after its approval in the registry of deeds for the county or district in which the property lies, and the lien shall not be dissolved until the bond is so recorded. The bond may be taken by the obligee from the registry at any time after it has been recorded.

Bond to contain description of property, and to be recorded, etc.  
1874, 321, §§ 1, 2.  
1877, 93, §§ 1, 3.

SECT. 44. When it appears of record in the court in which a suit is pending for enforcing a lien under this chapter that the lien has been in any manner dissolved, the clerk of the court shall forward to the register of deeds for the county or district in which the property is situated a certificate of the

Clerk of court to certify to register when lien is dissolved.  
1877, 93, § 4.



fact and manner of such dissolution. The register shall file such certificate with the statement mentioned in section six, and shall also make a record thereof with the record of said statement.

Lien to be discharged of record when debt is paid.  
G. S. 150, § 41.

SECT. 45. When a debt secured by a lien under this chapter is fully paid, the creditor shall, at the expense of the debtor, enter a discharge of his lien on the margin of the record of the statement, or shall execute a release, which may be recorded where the statement is recorded.

Action at law not barred.  
G. S. 150, § 40.

SECT. 46. Nothing contained in this chapter shall be construed to prevent a person entitled to a lien under its provisions from maintaining an action at common law, in like manner as if he had no lien for the security of his debt.

## CHAPTER 192.

### LIENS UPON PERSONAL PROPERTY.

#### LIENS ON VESSELS.

##### SECTION

14. Lien on vessels for labor performed or materials furnished.
15. Such lien to be dissolved, unless sworn statement is filed within four days after departure of vessel.
16. Certain inaccuracies in statement not to invalidate the lien.
17. Lien may be enforced by petition, etc.
18. Form of petition.
19. Who may join in petition.
20. Amendments.
21. Distribution of proceeds of sale.
22. Owner of vessel may pay debt secured by lien, and retain claim against contractor.

##### SECTION

23. Liens on foreign vessels not affected.

#### OTHER LIENS.

24. Party having lien other than those before provided for, may petition for leave to sell, etc.
25. Notice of petition to be given to owner of property.
26. Provision for case where owner is unknown, or resides out of the state.
27. Order for sale, and distribution of proceeds.
28. Determination of amount due.
29. Right of appeal.
30. Costs.

#### LIENS ON VESSELS.

Lien on vessels for labor performed or materials furnished.

G. S. 151, § 12.  
13 Gray, 129, 134.  
15 Gray, 284.  
2 Allen, 605.  
7 Allen, 287.  
11 Allen, 157.  
98 Mass. 320.  
100 Mass. 409.  
103 Mass. 227.  
115 Mass. 170.  
119 Mass. 179.

SECTION 14. When by virtue of a contract, express or implied, with the owners of a vessel, or with the agents, contractors, or sub-contractors of such owners, or with any of them, or with a person who has been employed to construct, repair, or launch a vessel or to assist therein, money is due for labor performed, materials used, or labor and materials furnished in the construction, launching, or repairs of, or for constructing the launching ways for, or for provisions, stores, or other articles furnished for or on account of such vessel in this Commonwealth, the person to whom such money is due shall have a lien upon the vessel, her tackle, apparel, and furniture, to secure the payment

of such debt, and such lien shall be preferred to all others on such vessel except that for mariners' wages, and shall continue until the debt is satisfied.

SECT. 15. Such lien shall be dissolved unless the person claiming the same files, within four days from the time when the vessel departs from the port at which she was when the debt was contracted, in the office of the clerk of the city or town within which the vessel was at such time, a statement, subscribed and sworn to by him or by some person in his behalf, giving a just and true account of the demand claimed to be due to him, with all just credits, and also the name of the person with whom the contract was made, the name of the owner of the vessel, if known, and the name of the vessel, or a description thereof sufficient for identification; which statement shall be recorded by such clerk in a book kept by him for that purpose, and for such recording the clerk shall receive the same fees as for recording mortgages of equal length.

Such lien to be dissolved, unless sworn statement is filed within four days after departure of vessel.  
G. S. 151, § 18.  
15 Gray, 234.  
8 Allen, 35.  
98 Mass. 320.  
119 Mass. 179.

SECT. 16. If the vessel is partly constructed in one place and partly in another, either place shall be deemed the port at which she was when the debt was contracted within the meaning of this chapter; and the validity of the lien shall not be affected by any inaccuracy in the description of the vessel, if she can be recognized thereby, nor by any inaccuracy in stating the amount due for labor or materials, unless it appears that the person filing the statement has wilfully and knowingly claimed more than is due.

Certain inaccuracies in statement not to invalidate the lien.  
G. S. 151, § 14.  
8 Allen, 35.  
115 Mass. 170.  
119 Mass. 179.

SECT. 17. Such lien may be enforced by petition to the superior court for the county where the vessel was at the time when the debt was contracted, or in which she is at the time of instituting proceedings. The petition may be entered in court or filed in the clerk's office in vacation, or may be inserted in a writ of original summons with an order of attachment, and served, returned, and entered like other civil actions, and the subsequent proceedings for enforcing the lien shall, except as hereinafter provided, be as prescribed in chapter one hundred and ninety-one for enforcing liens on buildings and land, so far as the provisions of said chapter are applicable. At the time of entering or filing the petition, a process of attachment against such vessel, her tackle, apparel, and furniture, shall issue and continue in force, or may be dissolved like attachments in civil cases, but such dissolution shall not dissolve the lien.

Lien may be enforced by petition, etc.  
G. S. 151, § 15.  
8 Allen, 207.  
103 Mass. 227.  
109 Mass. 676.

SECT. 18. The petition shall contain a brief statement of the labor, materials, or work done or furnished, or of the stores, provisions, or other articles furnished, and of the amount due

Form of petition.  
G. S. 151, § 16.  
98 Mass. 320.

therefor, with a description of the vessel subject to the lien, and all other material facts and circumstances, and shall pray that the vessel may be sold, and the proceeds of the sale applied to the discharge of the demand.

Who may join  
in petition.  
G. S. 151, § 18.

SECT. 19. Any number of persons having such liens upon the same vessel may join in a petition to enforce the same; and the same proceedings shall be had in regard to the respective rights of each petitioner, and the respondent may defend as to each petitioner, in the same manner as if they had severally petitioned for their individual liens.

Amendments.  
G. S. 151, § 17.

SECT. 20. The court may at any time allow either party to amend his pleadings as in actions at common law.

Distribution  
of proceeds of  
sale.  
G. S. 151, § 19.

SECT. 21. When there is money due to more than one person holding a lien upon a vessel under the provisions of this chapter, and all parties interested have been cited to appear and answer, the claims of all shall be marshalled, and the court shall make such order or decree as may be necessary to prevent the enforcement of a double lien for the same labor, materials, stores, provisions, or other articles, and to secure the just rights of all. The proceeds arising from the sale of such vessel, after deducting all proper costs and expenses, shall be distributed among the several claimants according to the amount of their respective debts, except that, when such proceeds are insufficient to satisfy the liens of all, those having liens for labor shall receive a percentage on their respective claims one-third greater, as near as may be, than those having liens for materials, stores, or other articles.

Owner of vessel  
may pay debt  
secured by lien,  
and retain  
claim against  
contractor.  
1862, 185.

SECT. 22. When a contractor or sub-contractor unreasonably neglects or refuses to pay for labor by him procured to be performed in constructing, repairing, or launching a vessel upon which a lien exists therefor, the owner or other person who made the agreement with such contractor or sub-contractor may pay the debt secured by the lien, and have the same claim against such contractor or sub-contractor as if the lien had been enforced by judgment of court.

Liens on foreign  
vessels not  
affected.  
G. S. 151, § 20.

SECT. 23. The nine preceding sections shall not affect any lien on foreign vessels existing independent of statute.

#### OTHER LIENS.

Party having  
lien, other than  
those before  
provided for,  
may petition for  
leave to sell, etc.  
G. S. 151, § 21.  
14 Allen, 139.

SECT. 24. Whoever has a lien, other than those described in chapter one hundred and ninety-one and in the ten preceding sections, for money due to him on account of work and labor, care and diligence, or money expended on or about personal property by reason of any contract express or implied, if such

money is not paid within sixty days after a demand in writing delivered to the debtor or left at his usual place of abode, if within this Commonwealth, or made by letter addressed to him at his usual place of abode without the Commonwealth and deposited in the post-office to be sent to him, may apply by petition to a police, district, or municipal court, or to a trial justice in the county where the petitioner resides, for an order for the sale of the property in satisfaction of the debt.

SECT. 25. The court or justice shall thereupon issue a notice to the owner of the property to appear at a time and place designated, to show cause why the prayer of the petition should not be granted; which notice shall be served by delivering to the owner or by leaving at his usual place of abode, if within the Commonwealth, a copy thereof fourteen days before the day of hearing, and a return of the service shall be made by some officer authorized to serve civil process, or by some other person with an affidavit to the truth of the return.

Notice of petition to be given to owner of property.  
G. S. 151, § 22.

SECT. 26. If the owner is unknown, the application may be made sixty days after the money becomes due, and a notice may issue "to the unknown owner," describing the property. If the owner resides out of the Commonwealth, or is unknown, notice may be given by a publication of the order in the manner prescribed for the publication of notices in section seven.

Provision for case where owner is unknown, or resides out of the state.  
G. S. 151, §§ 23, 24.

SECT. 27. If the owner makes default at the time appointed, or if upon a hearing of the parties it appears that a lien exists upon the property, and that the property ought to be sold for the satisfaction of the debt, the court or justice may make an order for that purpose, and, if no appeal is taken, the property may be sold in conformity therewith. Any surplus of the proceeds of the sale, after satisfying the debt and all costs and charges, shall be paid to the owner upon demand.

Order for sale, and distribution of proceeds.  
G. S. 151, § 25.

SECT. 28. The court or justice may ascertain the amount due up to the time of the entering of the order, and may make a record thereof.

Determination of amount due.  
G. S. 151, § 26.

SECT. 29. Either party may appeal from the final order of the court or justice in the same manner as in other civil cases, and the case shall be heard and determined in the court above, and such order made as justice may require. If the respondent appeals, he shall recognize for the prosecution of his appeal, and for the payment, if judgment is rendered against him, of any balance of the debt, with costs, which may remain unsatisfied after a sale of the property.

Right of appeal.  
G. S. 151, § 27.

SECT. 30. The prevailing party shall recover his costs, and the court or justice may issue execution therefor.

Costs.  
G. S. 151, § 28.

## CHAPTER 16.

## SECURITY AGAINST MECHANICS' LIENS ON PUBLIC BUILDINGS.

1878, 209.

SECTION 64. When public buildings or other public works upon which liens might attach for labor or materials, if they belonged to private persons, are about to be constructed or repaired for the Commonwealth by contract, the officers or agents contracting in behalf of the Commonwealth shall obtain sufficient security, by bond or otherwise, for payment by the contractor and by all sub-contractors for all labor performed or furnished and for all materials used in such construction or repair.

## CHAPTER 11.

## PROPERTY EXEMPT FROM TAXATION.

G.S. 11, § 5, cl. 6.  
1866, 206, § 1.

SECTION 5. The following property . . shall be exempted from taxation:—

. . . . The wearing apparel and farming utensils of every person; his household furniture not exceeding one thousand dollars in value; and the necessary tools not exceeding three hundred dollars in value of a mechanic.

## CHAPTER 12.

## PROPERTY EXEMPT FROM SEIZURE FOR TAXES.

SECTION 8. [This section exempts from seizure for non-payment of taxes among other property the following]: The tools or implements necessary for his trade or occupation: beasts of the plough necessary for the cultivation of his improved lands, etc.

## CHAPTER 171.

## PROPERTY EXEMPT FROM EXECUTION.

5 Mass. 313.  
13 Mass. 82.  
2 Pick. 80.

SECTION 34. [This section exempts from execution among other property of a debtor the following]: The tools, imple-

ments, and fixtures necessary for carrying on his trade or business, not exceeding one hundred dollars in value.

10 Pick. 423.  
6 Gray, 298.  
7 Gray, 67, 69.

12 Gray, 351.	1 Allen, 283.	2 Allen, 395.	3 Allen, 570.
5 Allen, 43, 148.	6 Allen, 292.	9 Allen, 156.	14 Allen, 236.
101 Mass. 105.	108 Mass. 52.	123 Mass. 194.	

Materials and stock designed and procured by him, and necessary for carrying on his trade or business, and intended to be used or wrought therein, not exceeding one hundred dollars in value.

6 Gray, 298.  
7 Gray, 69.  
9 Gray, 62.  
10 Gray, 242.  
5 Allen, 148.  
6 Allen, 292.

9 Allen, 156. 11 Allen, 592.

The boat, fishing tackle, and nets of fishermen, actually used by them in the prosecution of their business, to the value of one hundred dollars.

One sewing-machine, not exceeding one hundred dollars in value, in actual use by each debtor or by his family.

1860, 65.  
1 Allen, 283.

3 Allen, 570.

6 Allen, 292.

Shares in co-operative associations formed under chapter one hundred and six,\* not exceeding twenty dollars in value in the aggregate.

1870, 224, § 53.

## CHAPTER 28.

### PAYMENT OF WAGES BY CITIES.

SECTION 12. Cities shall, at intervals not exceeding seven days, pay all laborers who are employed by them at a rate of wages not exceeding two dollars a day, if such payment is demanded.

Cities to pay weekly or oftener laborers whose pay is not more than two dollars a day, if, etc. 1879, 128.

## CHAPTER 157.

### PAYMENT OF WAGES IN CASES OF INSOLVENCY.

SECTION 104. In the order for a dividend under the preceding section,† the following claims shall be entitled to priority, and to be first paid in full in their order:—

Preferred claims.  
G. S. 118, § 96.  
1862, 183, § 11.  
1879, 95.  
2 Cush. 371.  
13 Gray, 307.

First, All debts due to the United States, and all debts due to and taxes assessed by this state, or any county, city, or town therein.

Second, Wages due to an operative, clerk, or servant, to an amount not exceeding one hundred dollars, for labor performed within one year next preceding the first publication of the notice, or for labor for the recovery of payment for which a suit commenced within one year after the performance thereof is

\* See p. 10, ante.

† In cases of insolvency.

pending, or has terminated within one year from said first publication.

Wages due to an operative from an operative working under contract. 1879, 204.

SECT. 105. The estate shall be liable for wages due to an operative from another operative who has contracted or agreed to do certain specified work for the debtor, to the amount of one hundred dollars, for labor actually performed on such work within one year next preceding the first publication of the notice, and in the division of the estate such wages shall have the priority given to wages due to operatives under the provisions of the preceding section; but all payments under the provisions of this section shall be charged to the account of the operative who, as principal, has contracted or agreed to do the work, and such payments, and the liability herein imposed, shall not exceed the amount due such principal operative for such work performed within the time hereinbefore mentioned. This section shall not be construed to apply to cases covered by the provisions of sections one hundred and forty-three to one hundred and forty-seven inclusive, of chapter one hundred and twelve.\*

## CHAPTER 137.

### WAGES PAYABLE FROM THE INSOLVENT ESTATES OF DECEASED PERSONS.

When estate of deceased person is insolvent, debts to be paid in certain order. G. S. 99, § 1. 1881, 156. 16 Mass. 308. 6 Pick. 481. 16 Pick. 255. 4 Met. 325. 15 Gray, 471. 4 Allen, 141. 127 Mass. 242.

SECTION 1. When the estate of a person deceased is insufficient to pay all his debts, it shall, after discharging the necessary expenses of his funeral and last sickness and the charges of administration, be applied to the payment of his debts in the following order:—

First, Debts entitled to a preference under the laws of the United States.

Second, Public rates, taxes, and excise duties.

Third, Wages or compensation, to an amount not exceeding one hundred dollars, due to a clerk, servant, or operative, for labor performed within one year next preceding the death of such deceased person, or for such labor so performed for the recovery of payment for which a judgment has been rendered.

\* Relating to labor, etc., furnished in the construction of railroads. See p. 11, ante.

## CHAPTER 106.

## LIABILITY OF MEMBERS OR STOCKHOLDERS IN CORPORATIONS FOR WAGES.

SECTION 61. The members or stockholders in any corporation which is subject to this chapter shall be jointly and severally liable for . . . . . all sums of money due to operatives for services rendered within six months before demand made upon the corporation, and its neglect or refusal to make payment.

## CHAPTER 80.

## INMATES OF FACTORIES TO BE VACCINATED.

SECTION 54. Incorporated manufacturing companies . . . . . shall at the expense of their respective establishments . . . . . cause all inmates thereof to be vaccinated immediately upon their entrance thereto, unless they produce sufficient evidence of previous successful vaccination within five years.

Inmates of factories to be vaccinated.  
G. S. 20, § 30.

## CHAPTER 112.

## SECTIONS 178, 179. REGULATIONS RESPECTING RAILWAY EMPLOYEES.

*[The following Sections relate to railway employees.]*

SECTION 178. Every railroad corporation shall provide a uniform hat or cap and distinguishing badges, to be worn by all its employees whose duties relate immediately to the transportation of passengers or their luggage. A corporation neglecting to prescribe and furnish such uniform hat or cap and badges shall forfeit one hundred dollars for each week of such neglect; and if such an employee neglects to wear the same when on duty, the corporation employing him shall for each case of such neglect forfeit twenty-five dollars; and no employee, unless wearing his uniform hat or cap and badge, shall be permitted to exercise any authority or to perform any of the duties of his office.

Uniform caps and badges to be worn by employees.  
1874, 372, § 134.  
1876, 33.

SECT. 179. *[As amended by Chap. 125, Acts of 1883.]* No railroad corporation shall employ or keep in its employment, in a position which requires the person employed therein to distinguish form or color signals, any person, unless he has been examined for color-blindness or other defective sight by some

Persons not to be employed in certain positions, unless examined for color-blindness, etc.  
1881, 194.



competent person employed by the corporation, and has received a certificate that he is not disqualified for such position by color-blindness or other defective sight. A railroad corporation shall forfeit one hundred dollars for each violation of the provisions of this section.

## CHAPTER 117.

### OF CO-OPERATIVE BANKS.

#### SECTION

1. Corporations for accumulation of savings of members and lending funds to members.
2. Agreement, what to set forth.
3. Name.
4. Corporation, how organized.
5. Limit of capital. Plans of issuing stock, etc.
6. By-laws. Officers to hold office until successors are elected. Office of secretary and treasurer may be held by one person.
7. Monthly meetings. Dues.
8. Withdrawal of shares.
9. Shares, when matured.

#### SECTION

10. Moneys to be lent by monthly sales; how invested, if unsold.
11. Premiums.
12. Interest.
13. Security.
14. Payment. Partial payments.
15. Fines. Forfeiture of shares.
16. Recovery of loan.
17. Books of account. Duties of treasurer, etc.
18. Distribution of profits and losses. Guaranty Fund.
19. Corporation may buy and sell real estate.
20. Powers of savings bank commissioners.

Corporations for accumulation of savings of members and lending funds to members.  
1877, 224, § 1.

#### SECTION 1. [*As amended by Chap. 243, Acts of 1890.*]

Twenty-five or more persons who associate themselves together by an agreement in writing with the intention of forming a corporation for the purpose of accumulating the savings of its members paid into such corporation in fixed periodical instalments and lending to its members the funds so accumulated shall, by and with the consent of the board of commissioners of savings banks become a corporation upon complying with the provisions of the three following sections.

Agreement, what to set forth.  
1877, 224, § 2.

SECT. 2. The agreement shall set forth the fact that the subscribers thereto associated themselves with the intention of forming a corporation, the name by which the corporation shall be known, the purpose for which it is formed, the town or city, which shall be within this Commonwealth, in which it is located, and the limit of capital to be accumulated.

Name.  
1877, 224, § 3.

SECT. 3. [*As amended by Chap. 98, Acts of 1883.*] The name shall be one not previously in use by any existing corporation established under the laws of this Commonwealth, and shall be changed only by act of the General Court. The words "co-operative bank" shall form a part of the name.

SECT. 4. The provisions of sections eighteen, twenty, and twenty-one of chapter one hundred and six shall apply to such corporations, except that, in the certificate signed by the secretary of the Commonwealth, the limit of capital to be accumulated as fixed in the agreement of association shall be inserted, instead of the amount of the capital, that the certificate required by said section twenty-one to be filed and recorded may be signed and sworn to by the presiding and financial officers and a majority at least of the officers possessing the powers of directors, by whatever name they may be called, and that the fees to be paid for filing and recording the certificates required by said section twenty-one, including the issuing of the certificate of organization, shall be five dollars.

Corporation,  
how organized.  
1877, 224, § 4.

SECT. 5. The capital to be accumulated shall not exceed one million dollars, and shall be divided into shares of the ultimate value of two hundred dollars each. The shares may be issued in quarterly, half-yearly, or yearly series, in such amounts and at such times as the members may determine.

Limit of capital.

Plans of issuing  
stock, etc.  
1877, 224, § 5.

No person shall hold more than twenty-five shares in the capital of any one such corporation. No shares of a prior series shall be issued after the issue of a new series.

[*Relating to the subject matter of this section the following was enacted by Section 1 of Chap. 216, Acts of 1887.*]

The limitation of capital to be accumulated in any co-operative bank now organized or hereafter formed under the provisions of chapter one hundred and seventeen of the Public Statutes shall be held to apply to capital actually paid in, and no such bank shall be restrained from issuing shares so long as the capital actually paid in on shares is not in excess of one million dollars.

SECT. 6. [*As amended by Chap. 121, Acts of 1885.*] The number, title, duties, and compensation of the officers of the corporation, their terms of office, the time of their election, as well as the qualifications of electors, and the time of each periodical meeting of the officers and members, shall be determined by the by-laws; but no member shall be entitled to more than one vote at any election. All officers shall continue in office until their successors are duly elected, and no corporation shall expire from neglect on its part to elect officers at the time prescribed by the by-laws.

By-laws.  
Officers to hold  
office until suc-  
cessors are  
elected.  
1877, 224, §§ 6,  
16.

In any co-operative bank, now or hereafter formed under the provisions of chapter one hundred and seventeen of the Public Statutes, the offices of secretary and treasurer may be held by one and the same person.

One person  
may be both  
secretary and  
treasurer.

Monthly meet-  
ings. Dues.  
1877, 224, §§ 6,  
7, 9.  
1881, 271, § 1,  
cl. 3.

SECT. 7. The officers shall hold stated monthly meetings. At or before each of these meetings every member shall pay to the corporation as a contribution to its capital one dollar as dues upon each share held by him until the share reaches the ultimate value of two hundred dollars, or is withdrawn, cancelled, or forfeited. Payment of dues on each series shall commence from its issue.

Unpledged  
shares may be  
withdrawn  
upon giving  
thirty days'  
notice.

Settlement of  
shareholder's  
account.

Proviso.

Directors may  
retire unpledged  
shares.

Provisos.

Shares may be  
issued in the  
name of a  
minor.

SECT. 8. [As enacted by Section 2 of Chap. 216, Acts of 1887.] A member may withdraw his unpledged shares at any time by giving thirty days' notice of his intention so to do, written in a book held and provided by the corporation for that purpose. Upon such withdrawal the shareholder's account shall be settled as follows : — From the amount then standing to the credit of the shares to be withdrawn there shall be deducted all fines, a proportionate part of any unadjusted loss, together with such proportion of the profits previously credited to the shares as the by-laws may provide, and such shareholders shall be paid the balance : *provided*, that at no time shall more than one-half of the funds in the treasury be applicable to the demands of withdrawing members without the consent of the directors. The directors may at their discretion, under rules made by them, retire the unpledged shares of any series at any time after four years from the date of their issue, by enforcing the withdrawal of the same ; but whenever there shall remain in any series, at the expiration of five years after the date of its issue, an excess above one hundred unpledged shares, then it shall be the duty of the directors to retire annually twenty-five per centum of such excess existing at said expiration of five years after the date of its issue, so that not more than one hundred unpledged shares shall remain in such series at the expiration of nine years from the date of its issue, and thereafter the directors may in their discretion retire such other unpledged shares as they consider the best interests of the bank to require : *provided*, that whenever under the provisions of this section the withdrawal of shares is to be enforced the shares to be retired shall be determined by lot, and the holders thereof shall be paid the full value of their shares, less all fines and a proportionate part of any unadjusted loss ; and *provided, also*, that shares pledged for share loans shall be treated as unpledged shares.

Shares may be issued in the name of a minor, and if so issued may, at the discretion of the directors, be withdrawn, in manner as provided in section two of this act, by such minor, the parent or guardian of such minor, and in either case payments made on such withdrawals of shares shall be

valid. When a share or shares are held by any one in trust for another, the name and residence of the person for whom such share or shares are held shall be disclosed; and the account shall be kept in the name of such holder as trustee for such person; and, if no other notice of the existence and terms of such trust has been given in writing to the corporation, in the event of the death of the trustee, such shares may be withdrawn by the person for whom such deposit was made or by his legal representatives.

Shares held in trust.

SECT. 9. [*As amended by Chap. 251, Acts of 1882, and Chap. 216, Acts of 1887.*] When each unpledged share of a given series reaches the value of two hundred dollars, all payments of dues thereon shall cease, and the holder thereof shall be paid out of the funds of the corporation two hundred dollars therefor with interest at the rate of six per cent a year from the time of such maturity to the time of payment: *provided*, that at no time shall more than one-half of the funds in the treasury be applicable to the payment of such matured shares without the consent of the directors: *provided, further*, that when any series of shares, either pledged or unpledged, reaches maturity between the dates of adjustment of profits, or whenever shares are retired between such dates, the holders of such shares shall, in addition to the value thereof, be entitled to interest at the rate of six per cent per annum for all full months from the date of the preceding adjustment. And that before paying matured shares all arrears and fines shall be deducted.

Shares, when matured. 1881, 271, § 1, cl. 8.

Provisos.

SECT. 10. [*As amended by Chap. 78, Acts of 1890.*] The moneys accumulated, after due allowance made for all necessary and proper expenses and for the withdrawal of shares, shall, at each stated monthly meeting, be offered to the members according to the premiums bid by them for priority of right to a loan. Each member whose bid is accepted shall be entitled upon giving proper security to receive a loan of two hundred dollars for each share held by him, or such fractional part of two hundred dollars as the by-laws may allow. If a balance of money remains unsold after a monthly sale, the directors may invest the same in any of the securities named in the second clause of section twenty of chapter one hundred and sixteen, or may loan the same upon the shares of the corporation, on the approval of the directors or investing committee thereof, at the highest rate paid at the last preceding monthly sale of such moneys.

Moneys to be lent by monthly sales; how invested, if unsold. 1877, 224, § 7. 1881, 271, § 1, cl. 4.

SECT. 11. Premiums for loans shall consist of a percentage charged on the amount lent in addition to interest, and shall be deemed to be a consideration paid by the borrower for the

Premiums. 1877, 224, § 12.

present use and possession of the future or ultimate value of his shares, and shall together with interest and fines be received by the corporation as a profit on the capital invested in the loan, and shall be distributed to the various shares and series of said capital as hereinafter provided.

Interest.  
1881, 271, § 1,  
cl. 3.

SECT. 12. A borrowing member, for each share borrowed upon, shall, in addition to his dues and monthly premium, pay monthly interest on his loan at the rate of six per cent per annum until his shares reach the ultimate value of two hundred dollars each, or the loan has been repaid; and when said ultimate value is reached, said shares and loan shall be declared cancelled and satisfied, and the balance, if any, due upon the shares, shall be paid to the member.

[*Relating to the subject matter of this section the following was enacted by Section 2 of Chap. 251, Acts of 1882.*]

Interest may be  
paid on loans  
instead of pre-  
miums.

Any corporation organized under said chapter one hundred and seventeen may provide in its by-laws that the bid for loans at its stated monthly meetings shall, instead of a premium, be a rate of annual interest upon the sum desired payable in monthly instalments. Such bids shall include the whole interest to be paid, and may be at any rate not less than five per centum per annum.

Security.  
1877, 224, § 8.  
1881, 271, § 1,  
cl. 1.

SECT. 13. [*As amended by Chap. 159, Acts of 1889.*] For every loan made, a note secured by first mortgage of real estate situated in this Commonwealth shall be given, accompanied by a transfer and pledge of the shares of the borrower. The shares so pledged shall be held by the corporation as collateral security for the performance of the conditions of said note and mortgage. Said note and mortgage shall recite the number of shares pledged and the amount of money advanced thereon, and shall be conditioned for the payment at the stated meetings of the corporation of the monthly dues on said shares, and the interest and premium upon the loan, together with all fines on payments in arrears until said shares reach the ultimate value of two hundred dollars each, or said loan is otherwise cancelled and discharged: *provided*, that the shares without other security may in the discretion of the directors be pledged as security for loans, to an amount not exceeding their value as adjusted at the last adjustment and valuation of shares before the time of the loan.

Proviso.

If the borrower neglects to offer security satisfactory to the directors within the time prescribed by the by-laws, his right to the loan shall be forfeited, and he shall be charged with one month's interest and one month's premium at the rate

bid by him, together with all expenses, if any, incurred; and the money appropriated for such loan may be re-loaned at the next or any subsequent meeting.

SECT. 14. A borrower may repay a loan at any time, upon application to the corporation, whereupon, on settlement of his account, he shall be charged with the full amount of the original loan, together with all monthly instalments of interest, premium, and fines in arrears, and shall be given credit for the withdrawing value of his shares pledged and transferred as security; and the balance shall be received by the corporation in full satisfaction and discharge of said loan: *provided*, that all settlements made at periods intervening between stated meetings of the directors shall be made as of the date of the stated meeting next succeeding such settlement; and *provided*, that a borrower desiring to retain his shares and membership may at his option repay his loan without claiming credit for said shares, whereupon said shares shall be re-transferred to him, and shall be free from any claim by reason of said cancelled loan.

Payment.  
1877, 224, § 11.

Provision.

[*Relating to the subject matter of this section the following was enacted by Section 4 of Chap. 216, Acts of 1887.*]

Partial payments of loans on real estate made by any co-operative bank may be received in sums of fifty dollars or any multiple thereof; and for each two hundred dollars so repaid one share of stock shall be released from pledge.

SECT. 15. Members who make default in the payment of their monthly dues, interest, and premiums, shall be charged a fine not exceeding two per cent a month on each dollar in arrears. No fines shall be charged after the expiration of six months from the first lapse in any such payment, nor upon a fine in arrears. The shares of a member who continues in arrears more than six months shall, at the option of the directors, if the member fails to pay the arrears within thirty days after notice, be declared forfeited, and the withdrawing value of the shares at the time of the first default shall be ascertained, and, after deducting all fines and other legal charges, the balance remaining shall be transferred to an account to be designated the "Forfeited Share Account" to the credit of the defaulting member. Said member, if not a borrower, shall be entitled upon thirty days' notice to receive the balance so transferred without interest from the time of the transfer, in the order of his turn, out of the funds appropriated to the payment of withdrawals. All shares so forfeited or transferred shall cease to participate in any profits of the corporation accruing after the last adjustment and valuation of shares before said first default.

Fines, forfeiture  
of shares.  
1877, 224, § 18.

Recovery of  
loan.

SECT. 16.. [*As enacted by Chap. 251, Acts of 1882, amended by Chap. 121, Acts of 1885.*] If a borrowing member is in arrears for dues, interest, premium or fines for more than six months, the directors may, at their discretion, declare the shares forfeited after one month's notice, if the arrears continue unpaid. The account of such borrowing member shall then be debited with the arrears of interest, premium and fines to date of forfeiture, and the shares shall be credited upon the loan at their withdrawing value. The balance of the account may and after six months shall be enforced against the security, and be recovered as secured debts are recovered at law.

Amendment.

Books of  
account. Duties  
of treasurer,  
etc.  
1877, 224, § 14.

SECT. 17. The general accounts of every such corporation shall be kept by double entry. All moneys received by the corporation from each member shall be receipted for by persons designated by the directors, in a pass-book provided by the corporation for the use of and to be held by the member; and said pass-book shall be plainly marked with the name and residence of the holder thereof, the number of shares held by him, and the number or designation of the series or issue to which said shares respectively belong, and the date of the issue of such series. All moneys so received shall be originally entered by the proper officer in a book to be called the "cash-book," to be provided by the corporation for the purpose, and the entries therein shall be so made as to show the name of the payer, the number of shares, the number or designation of the series or issues of the particular share or shares so entered, together with the amount of dues, interest, premiums, and fines paid thereon, as the case may be. Each payment shall be classified and entered in a column devoted to its kind. Said cash-book shall be closed after the termination of each stated meeting, and shall be an exhibit of the receipts of all moneys paid at said meeting. All payments made by the corporation for any purpose whatsoever shall be by order, check, or draft upon the treasurer, signed by the president and secretary, and endorsed by the persons in whose favor the same are drawn. The name of the payee, the amount paid, and the purpose, object, or thing for which the payment is made, together with its date, shall be entered on the margin of said order, check, or draft. The treasurer shall dispose of and secure the safe keeping of all moneys, securities, and property of the corporation, in the manner designated by the by-laws, and the treasurer and secretary shall give such security for the faithful performance of their respective duties as the by-laws may direct.

SECT. 18. The profits and losses may be distributed annually, semi-annually, or quarterly, to the shares then existing, but shall be distributed at least once in each year, and whenever a new series of shares is to be issued. Profits and losses shall be distributed to the various shares existing at the time of such distribution, in proportion to their value at that time, and shall be computed upon the basis of a single share fully paid to the date of distribution. Losses shall be apportioned immediately after their occurrence.

Distribution of profits and losses. 1881, 271, § 1, cl. 2.

*[Relating to the subject matter of this section the following was enacted by Section 2 of Chap. 121, Acts of 1885.]*

At each periodical distribution of profits the directors shall reserve as a guaranty fund a sum not less than one nor more than five per cent of the net profits accruing since the next preceding adjustment, until such fund amounts to five per cent of the dues capital, which fund shall thereafter be maintained and held; and said fund shall be at all times available to meet losses in the business of the corporation from depreciation of its securities or otherwise.

Guaranty fund to be reserved from profits.

SECT. 19. Any such corporation may purchase at any sale, public or private, any real estate upon which it may have a mortgage, judgment, lien, or other encumbrance, or in which it may have an interest; and may sell, convey, lease, or mortgage, at pleasure, the real estate so purchased, to any person or persons whatsoever. All real estate so acquired shall be sold within five years from the acquisition of title thereto.

Corporation may buy and sell real estate. 1877, 224, § 17.

SECT. 20. The commissioners of savings banks shall perform in reference to every such corporation the same duties, and shall have the same powers, as are required of or given to them in reference to savings banks, and shall annually make report to the General Court of such facts and statements respecting such associations and in such form as they deem that the public interest requires. Every officer of such corporation shall answer truly all inquiries made, and shall make all returns required by the commissioners.

Powers of savings bank commissioners. 1879, 129, §§ 1, 2.

*[Relating to the subject matter of this section the following was enacted by Section 2 of Chap. 159, Acts of 1889.]*

Every co-operative bank shall annually within twenty days after the last business day of October make a return to the commissioners of savings banks in such form as may be prescribed by them, showing accurately the condition thereof at close of business on said day, which return shall be signed and sworn to by the secretary and treasurer of such corporation. The president and five or more of the directors shall certify and make oath that the report is correct according to their best knowledge and belief.

Annual returns to be made.



## CHAPTER 31.

## THE BUREAU OF STATISTICS OF LABOR.

*[The following Sections of this Chapter relate to the constitution, duties, and powers of the Bureau of Statistics of Labor.]*

Bureau of statistics to be established.

its officers.

its duties.  
Res. 1869, 102.  
Res. 1873, 53.  
1876, 151, § 2.

powers.  
Res. 1869, 102.

SECTION 13. A chief appointed by the governor with the advice and consent of the council, and a first clerk appointed by the chief, shall constitute a bureau of statistics of labor: a chief shall be appointed in May in the year eighteen hundred and eighty-one, and thereafter biennially in May.

The bureau shall collect, assort, arrange, and present in annual reports to the General Court, on or before the first day of March in each year, statistical details relating to all departments of labor in the Commonwealth, especially in relation to the commercial, industrial, social, educational, and sanitary condition of the laboring classes, and to the permanent prosperity of the productive industry of the Commonwealth.

SECT. 14. The bureau shall have power to send for persons and papers, and to examine witnesses under oath; and such witnesses shall be summoned in the same manner and be paid the same fees as witnesses before the higher courts of the Commonwealth.

## CHAPTER 100.

## ACTION FOR LIQUOR SALES TO EMPLOYEES.

*[The following Section relates to this subject.]*

Penalty for selling liquor to a person, after special notice not to do so.  
1875, 99, § 16.  
128 Mass. 289.

Proviso.

SECTION 25. The husband, wife, parent, child, guardian, or employer of a person who has or may hereafter have the habit of drinking spirituous or intoxicating liquor to excess, may give notice in writing, signed by him or her, to any person, requesting him not to sell or deliver such liquor to the person having such habit. If the person so notified at any time within twelve months thereafter sells or delivers any such liquor to the person having such habit, or permits such person to loiter on his premises, the person giving the notice may, in an action of tort, recover of the person notified such sum, not less than one hundred nor more than five hundred dollars, as may be assessed as damages: *provided*, that an employer giving such notice shall not recover unless he is injured in his person or property. A married woman may bring such action in her own name, and

all damages recovered by her shall inure to her separate use. In case of the death of either party, the action and right of action shall survive to or against his executor or administrator.

## CHAPTER 112.

### TRANSPORTATION OF WORKINGMEN NEAR BOSTON.

SECTION 183. Every railroad corporation whose railroad runs out from Boston shall furnish on each week-day a morning train in and an evening train out for distances not exceeding fifteen miles, or suitable cars attached to other trains, and reaching and leaving Boston at about six o'clock in the forenoon and afternoon, or at such hours as may be fixed by the board; and for such trains shall furnish yearly season tickets at a rate not exceeding three dollars per mile per year, good once a day each way for six days in a week, and quarterly tickets not exceeding one dollar per quarter per mile: *provided*, that two hundred or more persons make application therefor.

Cheap morning and evening railroad trains to and from Boston.  
1872, 348.

Proviso.

## CHAPTER 147.

### OF CERTAIN RIGHTS AND LIABILITIES OF HUSBAND AND WIFE.

[*The following Section of this Chapter relates to the labor of married women on their own account.*]

SECTION 4. All work or labor performed by a married woman for a person other than her husband and children shall, unless there is an express agreement on her part to the contrary, be presumed to be performed on her separate account.

Labor of married woman presumed to be on her own account.  
1874, 184, § 1.

14 Gray, 389.

1 Allen, 258.

## CHAPTER 86.

### IMPORTATION OF LABORERS.

SECTION 12. Every corporation which brings into this Commonwealth any person not having a settlement therein, or by whose means or at whose instigation any such person is so brought, for the purpose of performing labor for such corporation, shall give a bond to the Commonwealth, to be delivered to the state board [*of health, lunacy and charity*], in the sum of three hundred dollars, conditioned that neither such person, nor any one legally dependent on him for support, shall within two years become a city, town, or state charge.

Corporations bringing strangers into state to labor, to give bond for their support.  
1866, 272, § 2.  
110 Mass. 210, 212.

## ACTS OF 1882.

## CHAPTER 150.

AN ACT FOR THE PRESERVATION OF THE HEALTH OF FEMALES EMPLOYED IN MANUFACTURING, MECHANICAL AND MERCANTILE ESTABLISHMENTS.

*Be it enacted, etc., as follows :*

Seats to be provided for certain female employees.

SECTION 1. Every person or corporation employing females in any manufacturing, mechanical or mercantile establishment in this Commonwealth shall provide suitable seats for the use of the females so employed, and shall permit the use of such seats by them when they are not necessarily engaged in the active duties for which they are employed.

Penalty.

SECT. 2. A person or corporation violating any of the provisions of this act shall be punished by fine of not less than ten dollars nor more than thirty dollars for each offence.

*Approved April 12, 1882.*

## CHAPTER 244.

AN ACT TO AUTHORIZE THE FORMATION OF RELIEF SOCIETIES BY THE EMPLOYEES OF RAILROAD AND STEAMBOAT CORPORATIONS.

*Be it enacted, etc., as follows :*

Relief societies may be formed by employees of railroad and steamboat corporations.

SECTION 1. Seven or more persons within this Commonwealth, employees of any railroad or steamboat corporation existing under the laws of this Commonwealth, who associate themselves together by such an agreement in writing as is described in section three of chapter one hundred and fifteen of the Public Statutes, with the intention of forming a corporation for the purpose of receiving, managing and applying such property and funds as it may receive by contribution, assessment or otherwise, for the improvement and benefit of its members and for the relief of its members and their families in case of sickness, injury, inability to labor or other cases of need, and upon complying with the provisions of section four of said chapter shall be and remain a corporation with all the rights, powers, privileges and immunities, and subject to all the duties, liabilities and restrictions of corporations organized under said chapter.

SECT. 2. The by-laws of any such corporation shall be approved by the board of railroad commissioners and shall prescribe the manner in which and the officers and agents by whom the purpose of its incorporation may be carried out, and also the manner in which its property may be invested. Such corporation shall make to the board of railroad commissioners annually and as often as required by said board such statements of its membership and financial transactions with other information relating thereto as the said board may deem necessary to a proper exhibit of its business and standing.

By-laws to be approved by the railroad commissioners.

SECT. 3. The board of railroad commissioners may verify such statement by an examination of the books and papers of the corporation; and whoever having charge or custody of such books and papers neglects to comply with the provisions of this section and the preceding section shall be punished by a fine not exceeding five hundred dollars.

Books and papers may be examined by the commissioners.

SECT. 4. This act shall take effect upon its passage.

*Approved May 19, 1882.*

## ACTS OF 1883.

### CHAPTER 84.

AN ACT PERMITTING MUNICIPAL OFFICERS TO AUTHORIZE MANUFACTURERS TO RING BELLS AND USE WHISTLES AND GONGS FOR THE BENEFIT OF THEIR WORKMEN.

*Be it enacted, etc., as follows :*

SECTION 1. Manufacturers and others employing workmen are authorized, for the purpose of giving notice to such employees, to ring bells and use whistles and gongs of such size and weight, in such manner and at such hours as the board of aldermen of cities and the selectmen of towns may in writing designate.

May notify workmen by ringing bells, etc., with approval of selectmen, etc.

SECT. 2. This act shall take effect upon its passage.

*Approved March 28, 1883.*

### CHAPTER 173.

AN ACT TO PROVIDE AGAINST THE USE OF UNSAFE ELEVATORS.

*Be it enacted, etc., as follows :*

If any elevator whether used for freight or passengers shall in the judgment of the inspector of factories and public buildings of the district in which such elevator is used, or, in the city of Boston, of the inspector of buildings of said city, be unsafe

Inspection of elevators.

Notice to be placarded when elevators are unsafe.

or dangerous to use or has not been constructed in the manner required by law, the said inspector shall immediately placard conspicuously upon the entrance to or door of the cab or car of such elevator a notice of its dangerous condition, and prohibit the use of such elevator until made safe to the satisfaction of said inspector. Any person removing such notice or operating such elevator while such notice is placarded as aforesaid, without authority from said inspector, shall be punished by a fine of not less than ten nor more than fifty dollars for each offence.

Penalty.

*Approved May 14, 1883.*

## CHAPTER 174.

### AN ACT FOR THE ESTABLISHMENT AND MAINTENANCE OF EVENING SCHOOLS.

*Be it enacted, etc., as follows :*

Evening schools to be maintained in cities and towns having 10,000 inhabitants.

SECTION 1. Every town and city having ten thousand or more inhabitants shall establish and maintain, in addition to the schools required by law to be maintained therein, evening schools for the instruction of persons over twelve years of age in orthography, reading, writing, geography, arithmetic, drawing, the history of the United States, and good behavior. Such other branches of learning may be taught in such schools as the school committee of the town shall deem expedient.

To be under superintendence of the school committee.

SECT. 2. The school committee of such towns shall have the same superintendence over such evening schools as they have over other schools, and may determine the term or terms of time in each year, and the hours of the evening during which such schools shall be kept, and may make such regulations as to attendance at such schools as they may deem expedient.

No exemption from requirements P. S. 47, § 1.

SECT. 3. Nothing contained in this act shall exempt any person from the requirements of section one of chapter forty-seven of the Public Statutes.

SECT. 4. This act shall take effect upon its passage.

*Approved May 14, 1883.*

## CHAPTER 217.

### AN ACT RELATING TO THE EMPLOYMENT OF PRISONERS.

*Be it enacted, etc., as follows :*

Limited number of convicts to

SECTION 1. The number of inmates of any prison in this Commonwealth who may be employed in the industries herein-

after named, under any contract or contracts made after the passage of this act, shall be limited as follows : in the manufacture of men's, boys' and youths' boots and shoes, not more than one hundred and fifty ; in the manufacture of women's, misses' and children's boots and shoes, not more than one hundred and fifty ; in the manufacture of hats, not more than one hundred and fifty ; in the manufacture of brushes, not more than one hundred ; in the manufacture of wood mouldings, not more than one hundred ; in the manufacture of harnesses, not more than one hundred ; or in any other industry, not to exceed one hundred and fifty.

to be employed  
in certain  
industries.

SECT. 2. This act shall take effect upon its passage.

*Approved June 2, 1883.*

## CHAPTER 243.

AN ACT FIXING THE RESPONSIBILITY OF RAILROAD CORPORATIONS FOR NEGLIGENTLY CAUSING DEATH OF EMPLOYEES.

*Be it enacted, etc., as follows :*

Section two hundred and twelve of chapter one hundred and twelve of the Public Statutes, is hereby amended by inserting after "indictment" in the twenty-second line, the following words, "and if an employee of such corporation being in the exercise of due care is killed under such circumstances as would have entitled the deceased to maintain an action for damages against such corporation, if death had not resulted, the corporation shall be liable in the same manner and to the same extent as it would have been if the deceased had not been an employee."

Liability of  
railroad  
corporations  
for causing  
death of em-  
ployees.

*Approved June 16, 1883.*

## ACTS OF 1884.

### CHAPTER 52.

AN ACT PROHIBITING THE LOCKING OF THE DOORS OF BUILDINGS, WHEREIN OPERATIVES ARE EMPLOYED, DURING THE HOURS OF LABOR.

*Be it enacted, etc., as follows :*

SECTION 1. No outside or inside doors of any building, wherein operatives are employed, shall be so locked, bolted or otherwise fastened during the hours of labor as to prevent free egress.

Doors not  
to be locked  
during hours  
of labor.

Penalty.

SECT. 2. Any person, firm or corporation being the owner, lessee or occupant of any such building who shall, after receiving five days' notice in writing from one of the inspectors of factories and public buildings, neglect or refuse to comply with the provisions of the preceding section, shall forfeit to the use of the Commonwealth not less than ten nor more than fifty dollars.

To be enforced  
by inspectors.

SECT. 3. The inspectors of factories and public buildings shall enforce the provisions of this act.

SECT. 4. This act shall take effect upon its passage.

*Approved March 1, 1884.*

## CHAPTER 69.

AN ACT RELATING TO INSTRUCTION IN THE ELEMENTARY USE OF HAND-TOOLS IN PUBLIC SCHOOLS.

*Be it enacted, etc., as follows :*

Elementary use  
of hand-tools  
may be taught  
in the public  
schools.

Section one of chapter forty-four of the Public Statutes, relating to the branches of instruction to be taught in public schools, is amended by striking out, in the eighth line, the words "and hygiene," and inserting instead the words "hygiene and the elementary use of hand-tools," and in any city or town where such tools shall be introduced, they shall be purchased by the school committee, at the expense of such city or town, and loaned to such pupils, as may be allowed to use them, free of charge ; subject to such rules and regulations as to care and custody as the school committee may prescribe.

*Approved March 10, 1884.*

## CHAPTER 103.

AN ACT TO PROVIDE FOR THE FURNISHING OF FREE TEXT-BOOKS AND SCHOOL SUPPLIES TO THE PUPILS OF THE PUBLIC SCHOOLS.

*Be it enacted, etc., as follows :*

Text-books,  
etc., to be loaned  
to pupils in pub-  
lic schools free  
of charge.

SECTION 1. The school committee of every city and town shall purchase, at the expense of such city or town, text-books and other school supplies used in the public schools ; and said text-books and supplies shall be loaned to the pupils of said public schools free of charge, subject to such rules and regulations as to care and custody as the school committee may prescribe.

SECT. 2. Pupils supplied with text-books at the time of the passage of this act shall not be supplied with similar books by the committee until needed.

Pupils supplied not to be furnished with books until needed.

SECT. 3. This act shall take effect upon the first day of August, eighteen hundred and eighty-four.

To take effect Aug. 1, 1884.

*Approved March 22, 1884.*

## CHAPTER 222.

### AN ACT REQUIRING RAILROAD COMPANIES TO USE SAFETY COUPLERS ON FREIGHT CARS.

*Be it enacted, etc., as follows:*

SECTION 1. Every railroad company operating a railroad or any portion of a railroad, wholly or partly within the state, shall place upon every freight car hereafter constructed or purchased by such corporation, and upon every freight car owned by such corporation, of which the coupler or drawbar is repaired by it, with intent to use such car, such forms or form of automatic or other safety coupler at each end thereof as the board of railroad commissioners may prescribe after examination and test of the same, and the railroad commissioners may annul any recommendation made by them.

Safety couplers to be used on freight cars.

SECT. 2. The provisions of this act may be enforced by the supreme judicial court on application of the attorney-general.

Provisions may be enforced by S. J. C.

SECT. 3. So much of this act as relates to the examination and test shall take effect on its passage, and the same shall take full effect on the first day of March next.

To take full effect March 1, 1885.

*Approved May 8, 1884.*

## CHAPTER 275.

### AN ACT RELATING TO THE EMPLOYMENT OF MINORS IN MERCANTILE ESTABLISHMENTS.

*Be it enacted, etc., as follows:*

SECTION 1. No minor under eighteen years of age shall be employed in laboring in any mercantile establishment more than sixty hours in any one week.

Not to be employed more than sixty hours in one week.

SECT. 2. Whoever, either for himself, or as superintendent, overseer or other agent for another, employs or has in his employment any person in violation of the provisions of the

Penalty.



Penalty to  
extend to cor-  
porations.

preceding section, or who fails to post the notice required in section third, and any parent or guardian who permits any minor to be so employed shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offence. Said penalty shall extend to corporations. A certificate of age of a minor, made and sworn to by him and by his parent or guardian at the time of his employment in a mercantile establishment, shall be *prima facie* evidence of his age in any trial for a violation of the preceding section.

Printed notice  
of hours of  
labor required  
to be posted up.

SECT. 3. Every employer shall post in one or more conspicuous places where such persons are employed a printed notice stating the number of hours' work required of them, not exceeding ten hours in any one day, on each day of the week; and the employment of any such person for a longer time in any day than that so stated shall be deemed a violation of this act, unless it appears that such employment is to make up for time lost on some previous day of the same week.

Provisions of  
P. S. 74, § 4, not  
to apply to  
mercantile  
establishments.

SECT. 4. Section four of chapter seventy-four of the Public Statutes as amended by chapter one hundred and fifty-seven of the acts of the year eighteen hundred and eighty-three shall not apply to mercantile establishments.

*Approved May 27, 1884.*

## ACTS OF 1885.

### CHAPTER 128.

#### AN ACT TO INCORPORATE THE IMPROVED DWELLINGS ASSOCIATION.

*Be it enacted, etc., as follows:*

Corporators.

SECTION 1. Nathaniel J. Bradlee, Richard H. Dana, Charles W. Dexter, Arthur B. Ellis, George S. Hale, Alice N. Lincoln, Ida M. Mason, George O. Shattuck, their associates and successors, are hereby made a corporation for the term of thirty years by the name of the "Improved Dwellings Association," in the city of Boston, to hold and improve real estate in said city for the purpose of erecting, maintaining, leasing and improving homes for working people and others of moderate means, and to promote the adoption of modes of building and enforcement of sanitary regulations calculated to secure the comfortable and healthful condition of structures so occupied; subject to the provisions of chapters one hundred and five and

Name and pur-  
pose.

one hundred and six of the Public Statutes and to all general laws which now are or may hereafter be in force relating to such corporations.

SECT. 2. Said corporation shall have power to buy, sell and hold real estate for the purposes aforesaid, not exceeding two hundred and fifty thousand dollars in value. May buy and sell real estate.

SECT. 3. The capital stock of said corporation shall not exceed two hundred and fifty thousand dollars to be divided into shares each of the par value of one hundred dollars, and the dividends on said shares shall not exceed six per cent per annum on the par value thereof. Capital stock and shares.

SECT. 4. Any surplus accumulated by said corporation shall be used as a sinking or reserve fund, or in improving the condition or increasing the number or the extent and capacity of the buildings occupied for such homes: *provided, however,* that the rentals from all the property owned by said corporation shall be limited to such rates as will after paying six per cent for every year maintain said sinking or reserve fund at a sum not exceeding fifty thousand dollars. Sinking fund. Proviso.

SECT. 5. This act shall take effect upon its passage.

*Approved April 3, 1885.*

## ACTS OF 1886.

### CHAPTER 87.

#### AN ACT TO PROVIDE FOR THE WEEKLY PAYMENT OF WAGES BY CORPORATIONS.

*Be it enacted, etc., as follows:*

SECTION 1. [*As amended by Chap. 399, Acts of 1887.*] Every manufacturing, mining or quarrying, mercantile, railroad, street railway, telegraph and telephone corporation, every incorporated express company and water company shall pay weekly each and every employee engaged in its business the wages earned by such employee to within six days of the date of said payment; and every incorporated city shall so pay every employee engaged in its business, unless such employee shall request in writing to be paid in some different manner; and every municipal corporation not a city, and every incorporated county shall so pay every employee engaged in its business if so required by him: *provided, however,* that if at any time of Wages to be paid weekly by corporations. Proviso.

payment any employee shall be absent from his regular place of labor he shall be entitled to said payment at any time thereafter upon demand. The provisions of this section shall not apply to any employee of a co-operative corporation or association who is a stockholder therein, unless such employee shall request such corporation to pay him weekly: and *provided, also*, that the railroad commissioners, after a hearing, may exempt any railroad corporation from paying weekly any of its employees who, in the opinion of the commissioners, prefer less frequent payments, and when in their opinion the interests of the public and such employees will not be injured thereby.

Penalty.

SECT. 2. [*As amended by Chap. 399, Acts of 1887.*] Any corporation violating any of the provisions of this act shall be punished by a fine not exceeding fifty and not less than ten dollars on each complaint under which it is convicted: *provided*, complaint for such violation is made within thirty days from the date thereof. The chief of the district police, or any state inspector of factories and public buildings, may bring a complaint against any corporation which neglects to comply with the provisions of this act for a period of two weeks after having been notified in writing by such chief or inspector that such complaint will be brought. On the trial of such complaint such corporation shall not be allowed to set up any defence for a failure to pay weekly any employee engaged in its business the wages earned by such employee to within six days of the date of said payment, other than the attachment of such wages by the trustee process, or a valid assignment thereof, or a valid set-off against the same, or the absence of such employee from his regular place of labor at the time of payment, or an actual tender to such employee at the time of payment of the wages so earned by him. No assignment of future wages payable weekly under the provisions of this act shall be valid if made to the corporation from whom such wages are to become due, or to any person on behalf of such corporation, or if made or procured to be made to any person for the purpose of relieving such corporation from the obligation to pay weekly under the provisions of this act.

Proviso.

Complaints against corporations for neglect to comply, etc., may be brought by the chief of the district police, etc.

Assignment of future wages to the corporation not valid.

Corporation failing to appear to be defaulted, etc.

SECT. 3. When a corporation against which a complaint is made under this act fails to appear after being duly served with process, its default shall be recorded, the allegations in the complaint taken to be true, and judgment shall be rendered accordingly.

Warrant of distress for penalty

SECT. 4. When judgment is rendered upon any such complaint against a corporation, the court may issue a warrant of

distress to compel the payment of the penalty prescribed by law, together with costs and interest. and costs may be issued.

SECT. 5. This act shall take effect upon the first day of July in the year eighteen hundred and eighty-six. To take effect July 1, 1886.

*Approved March 22, 1886.*

## CHAPTER 120.

### AN ACT FOR THE PROTECTION OF RAILROAD EMPLOYEES.

*Be it enacted, etc., as follows :*

SECTION 1. Every railroad corporation, operating a railroad or part of a railroad in this Commonwealth, shall before the first day of January in the year eighteen hundred and eighty-seven, adjust, fill or block the frogs, switches and guard rails on its track, with the exception of guard rails on bridges, so as to prevent the feet of its employees from being caught therein. The work shall be done to the satisfaction of the railroad commissioners evidenced by the certificate of their clerk. Frogs, switches, etc., to be blocked for safety of employees.

SECT. 2. Any railroad corporation failing to comply with the provisions of this act shall be punished by a fine of not less than one hundred dollars nor more than one thousand dollars. Penalty.

*Approved April 2, 1886.*

## CHAPTER 125.

### AN ACT TO AUTHORIZE RAILROAD CORPORATIONS TO JOIN CERTAIN RELIEF SOCIETIES.

*Be it enacted, etc., as follows :*

SECTION 1. Any railroad corporation operating a railroad or portion of a railroad in this Commonwealth may by vote of its directors associate itself with seven or more of its employees in forming a relief society under the provisions of chapter two hundred forty-four of the acts of the year eighteen hundred and eighty-two, or may upon the invitation of any society formed under said act become a member thereof, and may from time to time aid such society by contribution to its funds or otherwise. The by-laws of such society shall provide for the manner in which the railroad corporation shall vote and be represented in said society. Railroad corporations may associate with employees in forming relief societies.

SECT. 2. The funds of such relief society shall not be liable to attachment under trustee process, execution or any other Funds exempt from attachment

under trustee  
process.

process legal or equitable because of any debt or liability of the railroad corporation or of any member of the society.

SECT. 3. This act shall take effect upon its passage.

*Approved April 2, 1886.*

## CHAPTER 173.

AN ACT RELATING TO PROVIDING MEANS OF COMMUNICATION BETWEEN ROOMS IN MANUFACTURING ESTABLISHMENTS WHERE MACHINERY IS PROPELLED BY STEAM AND THE ROOM WHERE THE ENGINEER IS STATIONED.

*Be it enacted, etc., as follows :*

Communica-  
tion with en-  
gineer's room  
where ma-  
chinery is pro-  
pelled by steam.

SECTION 1. In every manufacturing establishment where the machinery used is propelled by steam, communication shall be provided between each room where such machinery is placed and the room where the engineer is stationed, by means of speaking tubes, electric bells or such other means as shall be satisfactory to the inspectors of factories : *provided*, that in the opinion of the inspectors such communication is necessary.

Proviso.

Inspectors of  
factories to en-  
force provisions  
of this act.

SECT. 2. The inspectors of factories shall enforce the provisions of this act, and any person, firm or corporation being the occupant of any manufacturing establishment or controlling the use of any building or room where machinery propelled by steam is used, violating the provisions of this act shall forfeit to the use of the Commonwealth not less than twenty-five nor more than one hundred dollars ; but no prosecution shall be made for such violation until four weeks after notice in writing by an inspector has been sent by mail to such person, firm or corporation of any changes necessary to be made to comply with the provisions of this act, nor then if in the mean time such changes have been made in accordance with such notification.

Penalty.

*Approved April 29, 1886.*

## CHAPTER 194.

AN ACT TO EXEMPT THE WAGES AND LAY OF SEAMEN FROM ATTACHMENT BY THE TRUSTEE PROCESS.

*Be it enacted, etc., as follows :*

Wages of sea-  
men exempt  
from attach-  
ment by trustee  
process.

SECTION 1. No wages or lay due or accruing to any seaman shall be subject to attachment by the trustee process ; but this act shall not affect causes now pending, or suits arising from contracts already made.

SECT. 2. This act shall take effect upon its passage.

*Approved May 6, 1886.*

## CHAPTER 209.

AN ACT AUTHORIZING CORPORATIONS TO ISSUE SPECIAL STOCK  
TO BE HELD BY THEIR EMPLOYEES ONLY.

*Be it enacted, etc., as follows:*

SECTION 1. Every corporation created under the provisions of chapter one hundred and six of the Public Statutes, by a vote of its general stockholders at a meeting duly called for the purpose, may issue special stock to be held only by the employees of such corporation. The par value of the shares of such special stock shall be ten dollars, and the purchasers thereof may pay for the same in monthly instalments of one dollar upon each share. Such special stock shall not exceed two-fifths of the actual capital of the corporation.

Special stock  
may be issued  
to employees.

SECT. 2. Whenever a dividend is paid by such corporation to its stockholders, the holders of such special stock shall receive upon each share, which has been paid for in full in time to be entitled to a dividend, a sum which shall bear such proportion to the sum paid as a dividend upon each share of the general stock of such corporation as the par value of the shares of such special stock bears to the par value of the shares of such general stock.

Dividends.

SECT. 3. The shares of such special stock shall not be sold or transferred except to an employee of such corporations or to the corporation itself. Any corporation issuing such special stock may provide by its by-laws as to the number of shares which may be held by any one employee, the methods of transfer and the redemption of such stock in case any person holding the same shall cease to be an employee of the corporation.

Shares not to be  
transferred ex-  
cept to the cor-  
poration or to  
an employee.

*Approved May 14, 1886.*

## CHAPTER 236.

AN ACT AUTHORIZING THE ESTABLISHMENT AND MAINTENANCE  
OF EVENING HIGH SCHOOLS IN CERTAIN CITIES.

*Be it enacted, etc., as follows:*

SECTION 1. Every city of fifty thousand or more inhabitants shall establish and thereafter annually maintain an evening high school in which shall be taught such branches of learning as the school committee thereof may deem expedient, whenever fifty or more residents, fourteen years of age or over, who desire

Evening high  
schools to be  
established in  
cities of fifty  
thousand in-  
habitants.

and, in the opinion of the school committee, are competent to pursue high school studies, shall petition in writing for an evening high school and certify that they desire to attend such school.

To be under  
superintendence  
of school com-  
mittee.

SECT. 2. The school committee shall have the same superintendence over such school as they have over day schools; may determine the term or terms of time in each year and the hours of the evening during which such school shall be kept, and may make such regulations as to attendance thereat as they may deem proper.

SECT. 3. This act shall take effect upon its passage.

*Approved May 22, 1886.*

## CHAPTER 260.

### AN ACT RELATIVE TO REPORTS OF ACCIDENTS IN FACTORIES AND MANUFACTURING ESTABLISHMENTS.\*

*Be it enacted, etc., as follows:*

Accidents to  
employees to be  
reported to dis-  
trict police.

SECTION 1. [*As amended by Chap. 83, Acts of 1890.*] All manufacturers, manufacturing corporations and proprietors of mercantile establishments shall forthwith send to the chief of the Massachusetts district police a written notice of any accident to an employee while at work in any factory, manufacturing or mercantile establishment operated by them whenever the accident results in the death of said employee or causes bodily injury of such a nature as to prevent the person injured from returning to his work within four days after the occurrence of the accident.

Penalty.

SECT. 2. Any person or corporation violating any of the provisions of section one of this act shall be punished by a fine not exceeding twenty dollars.

Chief of police  
to keep a record,  
etc.

SECT. 3. The chief of the Massachusetts district police shall keep a record of all accidents so reported to him, together with a statement of the name of the person injured, the city or town where the accident occurred, and the cause thereof, and shall include an abstract of said record in his annual report.

To take effect  
July 1, 1886.

SECT. 4. This act shall take effect on the first day of July in the year eighteen hundred and eighty-six.

*Approved June 1, 1886.*

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\* Also in mercantile establishments by the amendment made to Section 1 in 1890.

## CHAPTER 263.

AN ACT TO PROVIDE FOR A STATE BOARD OF ARBITRATION  
FOR THE SETTLEMENT OF DIFFERENCES BETWEEN EMPLOY-  
ERS AND THEIR EMPLOYEES.

*Be it enacted, etc., as follows :*

SECTION 1. [*As amended by Chap. 269, Acts of 1887.*] The governor, with the advice and consent of the council, shall, on or before the first day of July in the year eighteen hundred and eighty-six, appoint three competent persons to serve as a state board of arbitration and conciliation in the manner hereinafter provided. One of them shall be an employer or selected from some association representing employers of labor, one of them shall be selected from some labor organization and not an employer of labor, the third shall be appointed upon the recommendation of the other two: *provided, however,* that if the two appointed do not agree on the third man at the expiration of thirty days, he shall then be appointed by the governor. They shall hold office for one year or until their successors are appointed. On the first day of July in the year eighteen hundred and eighty-seven the governor, with the advice and consent of the council, shall appoint three members of said board in the manner above provided, one to serve for three years, one for two years and one for one year, or until their respective successors are appointed; and on the first day of July in each year thereafter the governor shall in the same manner appoint one member of said board to succeed the member whose term then expires, and to serve for the term of three years or until his successor is appointed. If a vacancy occurs at any time, the governor shall in the same manner appoint some one to serve out the unexpired term; and he may in like manner remove any member of said board. Each member of said board shall, before entering upon the duties of his office, be sworn to a faithful discharge thereof. They shall at once organize by the choice of one of their number as chairman. Said board shall choose one of its members as secretary, and may also appoint and remove a clerk of the board, who shall receive such salary as may be allowed by the board, but not exceeding nine hundred dollars a year.

Board of arbitration and conciliation to be appointed.

Proviso.

Vacancies.

Members to be sworn, and to organize by choice of chairman and clerk.

SECT. 2. The board shall, as soon as possible after its organization, establish such rules of procedure as shall be approved by the governor and council.

Rules of procedure.



Settlement of  
differences  
between em-  
ployers and em-  
ployees.

SECT. 3. [*As amended by Chap. 269, Acts of 1887.*] Whenever any controversy or difference, not involving questions which may be the subject of a suit at law or bill in equity, exists between an employer, whether an individual, copartnership or corporation, and his employees, if at the time he employs not less than twenty-five persons in the same general line of business in any city or town in this Commonwealth, the board shall, upon application as hereinafter provided, and as soon as practicable thereafter, visit the locality of the dispute and make careful inquiry into the cause thereof, hear all persons interested therein who may come before them, advise the respective parties what, if anything, ought to be done or submitted to by either or both to adjust said dispute, and make a written decision thereof. This decision shall at once be made public, shall be recorded upon proper books of record to be kept by the secretary of said board, and a short statement thereof published in the annual report hereinafter provided for, and the said board shall cause a copy thereof to be filed with the clerk of the city or town where said business is carried on.

Application for  
arbitration to  
be made by em-  
ployer or by  
majority of em-  
ployees.

SECT. 4. [*As amended by Chap. 269, Acts of 1887, and Chap. 385, Acts of 1890.*] Said application shall be signed by said employer, or by a majority of his employees in the department of the business in which the controversy or difference exists, or their duly authorized agent or by both parties, and shall contain a concise statement of the grievances complained of, and a promise to continue on in business or at work without any lock-out or strike until the decision of said board, if it shall be made within three weeks of the date of filing said application. When an application is signed by an agent claiming to represent a majority of such employees, the board shall satisfy itself that such agent is duly authorized in writing to represent such employees, but the names of the employees giving such authority shall be kept secret by said board. As soon as may be after the receipt of said application the secretary of said board shall cause public notice to be given of the time and place for the hearing thereon; but public notice need not be given when both parties to the controversy join in the application and present therewith a written request that no public notice be given. When such request is made, notice shall be given to the parties interested in such manner as the board may order, and the board may, at any stage of the proceedings, cause public notice to be given, notwithstanding such request. When notice has been given as aforesaid, each of the parties to the controversy, the employer on the one side, and the employees

interested on the other side, may in writing nominate, and the board may appoint, one person to act in the case as expert assistant to the board. The two persons so appointed shall be skilled in and conversant with the business or trade concerning which the dispute has arisen. It shall be their duty under the direction of the board to obtain and report to the board information concerning the wages paid and the methods and grades of work prevailing in manufacturing establishments within the Commonwealth of a character similar to that in which the matters in dispute may have arisen. Said expert assistants shall be sworn to the faithful discharge of their duty; such oath to be administered by any member of the board, and a record thereof shall be preserved with the record of the proceedings in the case. They shall be entitled to receive from the treasury of the Commonwealth such compensation as shall be allowed and certified by the board, together with all necessary travelling expenses. Nothing in this act shall be construed to prevent the board from appointing such other additional expert assistant or assistants as it may deem necessary. Should the petitioner or petitioners fail to perform the promise made in said application, the board shall proceed no further thereupon without the written consent of the adverse party. The board shall have power to summon as witness any operative in the departments of business affected and any person who keeps the records of wages earned in those departments, and to examine them under oath, and to require the production of books containing the record of wages paid. Summonses may be signed and oaths administered by any member of the board.

SECT. 5. Upon the receipt of such application and after such notice, the board shall proceed as before provided and render a written decision, which shall be open to public inspection, shall be recorded upon the records of the board and published at the discretion of the same, in an annual report to be made to the General Court on or before the first day of February in each year.

Board to render a decision in writing.

SECT. 6. Said decision shall be binding upon the parties who join in said application for six months, or until either party has given the other notice in writing of his intention not to be bound by the same at the expiration of sixty days therefrom. Said notice may be given to said employees by posting the same in three conspicuous places in the shop or factory where they work.

Decision to be binding for six months.

SECT. 7. [*As substituted for the original Section 7 by Chap. 269, Acts of 1887.*] The parties to any controversy or differ-

Parties may agree upon a

board of arbitration.

ence as described in section three of this act may submit the matters in dispute, in writing, to a local board of arbitration and conciliation ; such board may either be mutually agreed upon, or the employer may designate one of the arbitrators, the employees or their duly authorized agent another, and the two arbitrators so designated may choose a third, who shall be chairman of the board. Such board shall, in respect to the matters referred to it, have and exercise all the powers which the state board might have and exercise, and its decision shall have whatever binding effect may be agreed by the parties to the controversy in the written submission. The jurisdiction of such board shall be exclusive in respect to the matters submitted to it, but it may ask and receive the advice and assistance of the state board. The decision of such board shall be rendered within ten days of the close of any hearing held by it ; such decision shall at once be filed with the clerk of the city or town in which the controversy or difference arose, and a copy thereof shall be forwarded to the state board. Each of such arbitrators shall be entitled to receive from the treasury of the city or town in which the controversy or difference that is the subject of the arbitration exists, if such payment is approved in writing by the mayor of such city or the board of selectmen of such town, the sum of three dollars for each day of actual service, not exceeding ten days for any one arbitration. Whenever it is made to appear to the mayor of a city or the board of selectmen of a town that a strike or lock-out such as described in section eight of this act is seriously threatened or actually occurs, the mayor of such city or the board of selectmen of such town shall at once notify the state board of the facts.

SECT. 8. [*As substituted for the original Section 8 by Chap. 269, Acts of 1887.*] Whenever it shall come to the knowledge of the state board, either by notice from the mayor of a city or the board of selectmen of a town, as provided in the preceding section or otherwise, that a strike or lock-out is seriously threatened or has actually occurred in any city or town of the Commonwealth, involving an employer and his present or past employees, if at the time he is employing, or up to the occurrence of the strike or lock-out was employing not less than twenty-five persons in the same general line of business in any city or town in the Commonwealth, it shall be the duty of the state board to put itself in communication as soon as may be with such employer and employees, and endeavor by mediation to effect an amicable settlement between them, or to endeavor to persuade them, provided that a strike or lock-out has not

actually occurred or is not then continuing, to submit the matters in dispute to a local board of arbitration and conciliation, as above provided, or to the state board; and said state board may, if it deems it advisable, investigate the cause or causes of such controversy and ascertain which party thereto is mainly responsible or blameworthy for the existence or continuance of the same, and may make and publish a report finding such cause or causes and assigning such responsibility or blame. The board shall have the same powers for the foregoing purposes as are given it by section three of this act.

SECT. 9. [*As enacted by Chap. 269, Acts of 1887.*] Witnesses summoned by the state board shall be allowed the sum of fifty cents for each attendance, and the further sum of twenty-five cents for each hour of attendance in excess of two hours and shall be allowed five cents a mile for travel each way from their respective places of employment or business to the place where the board is in session. Each witness shall certify in writing the amount of his travel and attendance, and the amount due him shall be paid forthwith by the board, and for such purpose the board shall be entitled to draw from the treasury of the Commonwealth as provided for in chapter one hundred and seventy-nine of the acts of the year eighteen hundred and eighty-four.

Fees of  
witnesses.

SECT. 10. [*As enacted by Chap. 269, Acts of 1887.*] The members of said state board shall until the first day of July in the year eighteen hundred and eighty-seven be paid five dollars a day each for each day of actual service; and on and after said date they shall each receive a salary at the rate of two thousand dollars a year, to be paid out of the treasury of the Commonwealth, and both before and after said date they shall be allowed their necessary travelling and other expenses, which shall be paid out of the treasury of the Commonwealth.

Compensation  
of board.

SECT. 11. This act shall take effect upon its passage.

*Approved June 2, 1886.*

## ACTS OF 1887.

### CHAPTER 103.

#### AN ACT TO SECURE PROPER SANITARY PROVISIONS IN FACTORIES AND WORKSHOPS.

*Be it enacted etc., as follows:*

SECTION 1. [*As amended by Chap. 305, Acts of 1888.*] Every factory in which five or more persons are employed, and

Factories and  
workshops to be

kept in a cleanly state.

every factory, workshop, mercantile or other establishment or office in which two or more children, young persons or women are employed, shall be kept in a cleanly state and free from effluvia arising from any drain, privy or other nuisance, and shall be provided, within reasonable access, with a sufficient number of proper water-closets, earth-closets or privies for the reasonable use of the persons employed therein; and wherever two or more male persons and two or more female persons are employed as aforesaid together, a sufficient number of separate and distinct water-closets, earth-closets, or privies shall be provided for the use of each sex and plainly so designated, and no person shall be allowed to use any such closet or privy assigned to persons of the other sex.

Sufficient number of water-closets to be provided.

SECT. 2. [*As amended by Chap. 305, Acts of 1888.*] It shall be the duty of every owner, lessee or occupant of any premises so used as to come within the provisions of this act to carry out the same and to make the changes necessary therefor. In case such changes are made upon the order of an inspector of factories by the occupant or lessee of the premises he may at any time within thirty days of the completion thereof bring an action before any trial justice, police, municipal or district court against any other person having an interest in such premises, and may recover such proportion of the expense of making such changes as the court adjudges should justly and equitably be borne by such defendant.

Inspector of factories to notify the board of health of any neglect or default.

SECT. 3. When it appears to an inspector of factories that any act, neglect or default in relation to any drain, water-closet, earth-closet, privy, ash-pit, water supply, nuisance or other matter in a factory or in a workshop included under section one of this act, is punishable or remediable under chapter eighty of the Public Statutes, or under any law of the Commonwealth relating to the preservation of the public health, but not under this act, such inspector shall give notice in writing of such act, neglect or default to the board of health of the city or town within which such factory or workshop is situate, and it shall thereupon be the duty of such board of health to make enquiry into the subject of the notice, and to take such action thereon in the way of enforcing any provision of law within its authority as the facts may call for.

Penalties.

SECT. 4. Any person violating any provision of sections one and two of this act shall be punished by fine not exceeding one hundred dollars; but no criminal prosecution shall be made for such violation until four weeks after notice in writing by an inspector of factories of the changes necessary to be made to

Notice to be given to persons in default.

comply with the provisions of said sections has been sent by mail or delivered to such person, nor then if in the mean time such changes have been made in accordance with such notification. A notice shall be deemed a sufficient notice under this section to all the members of a firm or to a corporation, when given to one member of such firm, or to the clerk, cashier, secretary, agent or any other officer having charge of the business of such corporation or to its attorney; and in the case of a foreign corporation notice to the officer having the charge of such factory or workshop shall be sufficient; and such officer shall be personally liable for the amount of any fine in case a judgment against the corporation is returned unsatisfied.

SECT. 5. The following expressions used in this act shall have the following meanings: — Expressions defined.

The expression "person" means any individual, corporation, partnership, company or association.

The expression "child" means a person under the age of fourteen years.

The expression "young person" means a person of the age of fourteen years and under the age of eighteen years.

The expression "woman" means a woman of eighteen years of age and upwards.

The expression "factory" means any premises where steam, water or other mechanical power is used in aid of any manufacturing process there carried on.

The expression "workshop" means any premises, room or place, not being a factory as above defined, wherein any manual labor is exercised by way of trade or for purposes of gain in or incidental to any process of making, altering, repairing, ornamenting, finishing or adapting for sale any article or part of an article, and to which or over which premises, room or place the employer of the persons working therein has the right of access or control: *provided, however,* that the exercise of such manual labor in a private house or private room by the family dwelling therein, or by any of them, or in case a majority of the persons therein employed are members of such family, shall not of itself constitute such house or room a workshop within this definition. Provided.

The aforesaid expressions shall have the meanings above defined for them respectively in all laws of this Commonwealth relating to the employment of labor, whether heretofore or hereafter enacted, unless a different meaning is plainly required by the context.

SECT. 6. This act shall take effect upon its passage.

*Approved March 24, 1887.*

## CHAPTER 121.

AN ACT TO PROHIBIT THE EMPLOYMENT OF CHILDREN IN  
CLEANING DANGEROUS MACHINERY.*Be it enacted, etc., as follows :*

Children in fac-  
tories not to  
clean machinery  
while it is in  
motion.

SECTION 1. No child under the age of fourteen years shall be permitted to clean any part of the machinery in a factory while such part is in motion by the aid of steam, water or other mechanical power, or to clean any part of such machinery that is in dangerous proximity to such moving part.

Penalty.

SECT. 2. Whoever, either for himself or as superintendent, overseer or other agent of another, violates the provisions of the preceding section shall be punished by a fine of not less than fifty nor more than one hundred dollars for each offence.

*Approved March 28, 1887.*

## CHAPTER 173.

AN ACT TO SECURE THE PROPER VENTILATION OF FACTORIES  
AND WORKSHOPS.*Be it enacted, etc., as follows :*

Proper ventila-  
tion for facto-  
ries and work-  
shops.

SECTION 1. Every factory in which five or more persons are employed, and every workshop in which children, young persons or women, five or more in number, are employed, shall be so ventilated while work is carried on therein that the air shall not become so exhausted as to be injurious to the health of the persons employed therein, and shall also be so ventilated as to render harmless, so far as is practicable, all the gases, vapors, dust or other impurities generated in the course of the manufacturing process or handicraft carried on therein that may be injurious to health.

Inspector of fac-  
tories to see that  
provisions are  
enforced.

SECT. 2. If in a factory or workshop included in section one of this act any process is carried on by which dust is generated and inhaled to an injurious extent by the persons employed therein, and it appears to an inspector of factories that such inhalation could be to a great extent prevented by the use of a fan or other mechanical means, and that the same could be provided without excessive expense, such inspector may direct a fan or other mechanical means of a proper construction to be provided within a reasonable time, and such fan or other mechanical means shall be so provided, maintained and used.

SECT. 3. Any person employing labor in a factory or workshop and violating any provision of this act shall be punished by fine not exceeding one hundred dollars; but no criminal prosecution shall be made for any such violation unless such employer shall have neglected for four weeks to make such changes in his factory or workshop as shall have been ordered by an inspector of factories by a notice in writing delivered to or received by such employer. Penalty.

*Approved April 14, 1887.*

## CHAPTER 215.

AN ACT TO SECURE UNIFORM AND PROPER MEAL TIMES FOR  
CHILDREN, YOUNG PERSONS AND WOMEN EMPLOYED IN  
FACTORIES AND WORKSHOPS.

*Be it enacted, etc., as follows :*

SECTION 1. All children, young persons and women, five or more in number, employed in the same factory shall be allowed their meal time or meal times at the same time: *provided*, however, that any children, young persons or women who begin work in such factory at a later hour in the morning than the other children, young persons and women employed therein may be allowed their meal time or meal times at a different time, but no such children, young persons or women shall be employed during the regular meal hour in tending the machines, or doing the work of any other children, young persons or women in addition to their own. Meal times for children, young persons, and women in factories.  
Proviso.

SECT. 2. No child, young person or woman shall be employed in a factory or workshop, in which five or more children, young persons and women are employed, for more than six hours at one time without an interval of at least half an hour for a meal: *provided*, however, that a child, young person or woman may be so employed for not more than six and one-half hours at one time if such employment ends at an hour not later than one o'clock in the afternoon, and if such child, young person or woman is then dismissed from the factory or workshop for the remainder of the day, or for not more than seven and one-half hours at one time if such child, young person or woman is allowed sufficient opportunity for eating a lunch during the continuance of such employment, and if such employment ends at an hour not later than two o'clock in the afternoon and such child, young person or woman is then dismissed from the factory or workshop for the remainder of the day. Not to be employed more than six hours without an interval of half an hour.  
Proviso.



Not to apply to  
certain works.

SECT. 3. This act shall not apply to iron works, glass works, paper mills, letter-press printing establishments, print works, bleaching works or dyeing works; and the chief of the district police, where it is proved to his satisfaction that in any other class of factories or workshops it is necessary, by reason of the continuous nature of the process, or of special circumstances affecting such class, to exempt such class from the provisions of this act, and that such exemption can be made without injury to the health of the children, young persons and women affected thereby, may, with the approval of the governor of the Commonwealth, issue a certificate granting such exemption, public notice whereof shall be given in the manner directed by said chief, without expense to the Commonwealth.

Certain expressions defined.

SECT. 4. The following expressions used in this act shall have the following meanings: The expression "iron works" means any mill, forge or other premises in or on which any process is carried on for converting iron into malleable iron, steel or tin plate, or for otherwise making or converting steel. The expression "glass works" means any premises in which the manufacture of glass is carried on. The expression "paper mills" means any premises in which the manufacture of paper is carried on. The expression "letter-press printing establishments" means any premises in which the process of letter-press printing is carried on. The expression "print works" means any premises in which is carried on the process of printing figures, patterns or designs upon any cotton, linen, woollen, worsted or silken yarn or cloth, or upon any woven or felted fabric not being paper. The expression "bleaching works" means any premises in which the process of bleaching any yarn or cloth of any material is carried on. The expression "dyeing works" means any premises in which the process of dyeing any yarn or cloth of any material is carried on.

Penalty on  
agents, etc.

SECT. 5. [*As amended by Chap. 330, Acts of 1887.*] Whoever, either for himself or as superintendent, overseer or other agent of another, violates any of the provisions of this act shall be punished by fine of not less than fifty nor more than one hundred dollars: *provided, however*, that if any minor under eighteen years of age, or any woman, shall, without the orders, consent or knowledge of the employer, or of any superintendent, overseer, or other agent of the employer, labor in a factory or workshop during any part of any time allowed for dinner or for other meals in such factory or workshop, according to the notice required by law, and if a copy of such notice was posted in a conspicuous place in the room where such labor

Proviso.

took place, together with a rule of the establishment forbidding such minor or woman to labor during such time, then neither the employer, nor any superintendent, overseer, or other agent of the employer, shall be held responsible for such labor.

*Approved April 21, 1887.*

## CHAPTER 263.

AN ACT TO MAKE THE FIRST MONDAY OF SEPTEMBER, KNOWN AS LABOR'S HOLIDAY, A LEGAL HOLIDAY.

*Be it enacted, etc., as follows :*

SECTION 1. The first Monday of September in each year, being the day celebrated and known as Labor's Holiday, is hereby made a legal public holiday, to all intents and purposes, in the same manner as Thanksgiving, Fast and Christmas days, the twenty-second of February, the thirtieth day of May and the fourth day of July, are now by law made public holidays.

The first Monday of September made a legal holiday.

SECT. 2. This act shall take effect upon its passage.

*Approved May 11, 1887.*

## CHAPTER 270.

AN ACT TO EXTEND AND REGULATE THE LIABILITY OF EMPLOYERS TO MAKE COMPENSATION FOR PERSONAL INJURIES SUFFERED BY EMPLOYEES IN THEIR SERVICE.

*Be it enacted, etc., as follows :*

SECTION 1. Where, after the passage of this act, personal injury is caused to an employee, who is himself in the exercise of due care and diligence at the time : —

Liability of employers for personal injuries suffered by employees in their service.

(1) By reason of any defect in the condition of the ways, works or machinery connected with or used in the business of the employer, which arose from or had not been discovered or remedied owing to the negligence of the employer or of any person in the service of the employer and entrusted by him with the duty of seeing that the ways, works, or machinery were in proper condition ; or

(2) By reason of the negligence of any person in the service of the employer, entrusted with and exercising superintendence, whose sole or principal duty is that of superintendence.

(3) By reason of the negligence of any person in the service of the employer who has the charge or control of any

signal, switch, locomotive engine or train upon a railroad, the employee, or in case the injury results in death the legal representatives of such employee shall have the same right of compensation and remedies against the employer as if the employee had not been an employee of nor in the service of the employer, nor engaged in its work.

Liability where  
an employee is  
instantly killed,  
etc.

SECT. 2. Where an employee is instantly killed or dies without conscious suffering, as the result of the negligence of an employer, or of the negligence of any person for whose negligence the employer is liable under the provisions of this act, the widow of the deceased, or in case there is no widow, the next of kin, provided that such next of kin were at the time of the death of such employee dependent upon the wages of such employee for support, may maintain an action for damages therefor and may recover in the same manner, to the same extent, as if the death of the deceased had not been instantaneous, or as if the deceased had consciously suffered.

Amount of  
compensation  
receivable under  
this act.

SECT. 3. The amount of compensation receivable under this act in cases of personal injury shall not exceed the sum of four thousand dollars. In case of death, compensation in lieu thereof may be recovered in not less than five hundred and not more than five thousand dollars, to be assessed with reference to the degree of culpability of the employer herein, or the person for whose negligence he is made liable; and no action for the recovery of compensation for injury or death under this act shall be maintained, unless notice of the time, place and cause of the injury is given to the employer within thirty days, and the action is commenced within one year, from the occurrence of the accident causing the injury or death. But no notice given under the provisions of this section shall be deemed to be invalid or insufficient solely by reason of any inaccuracy in stating the time, place or cause of the injury: *provided*, it is shown that there was no intention to mislead, and that the party entitled to notice was not in fact misled thereby.

Proviso.

Liability of  
employer to  
employee of a  
contractor or  
sub-contractor.

SECT. 4. Whenever an employer enters into a contract, either written or verbal, with an independent contractor to do part of such employer's work, or whenever such contractor enters into a contract with a sub-contractor to do all or any part of the work comprised in such contractor's contract with the employer, such contract or sub-contract shall not bar the liability of the employer for injuries to the employees of such contractor or sub-contractor, by reason of any defect in the condition of the ways, works, machinery or plant, if they are the property of the employer, or furnished by him, and if such

defect arose or had not been discovered or remedied, through the negligence of the employer or of some person entrusted by him with the duty of seeing that they were in proper condition.

SECT. 5. An employee or his legal representatives shall not be entitled under this act to any right of compensation or remedy against his employer in any case where such employee knew of the defect or negligence which caused the injury, and failed within a reasonable time to give, or cause to be given, information thereof to the employer, or to some person superior to himself in the service of the employer, who had entrusted to him some general superintendence.

Employer not liable, if employee knew of defect which caused accident and failed to give notice thereof.

SECT. 6. Any employer who shall have contributed to an insurance fund created and maintained for the mutual purpose of indemnifying an employee for personal injuries for which compensation may be recovered under this act, or to any relief society formed under chapter two hundred and forty-four of the acts of the year eighteen hundred and eighty-two, as authorized by chapter one hundred and twenty-five of the acts of the year eighteen hundred and eighty-six, may prove, in mitigation of the damages recoverable by an employee under this act, such proportion of the pecuniary benefit which has been received by such employee from any such fund or society on account of such contribution of said employer, as the contribution of such employer to such fund or society bears to the whole contribution thereto.

Compensation where employer has contributed to an insurance fund for benefit of employees.

SECT. 7. This act shall not apply to injuries caused to domestic servants, or farm laborers, by other fellow employees, and shall take effect on the first day of September, eighteen hundred and eighty-seven.

Not to apply to injuries to domestic servants, etc., by other fellow employees.

*Approved May 14, 1887.*

## CHAPTER 272.

### AN ACT TO FACILITATE VOTING BY EMPLOYEES.

*Be it enacted, etc., as follows:*

SECTION 1. No person entitled to vote at a state or national election shall be employed upon the day on which any state or national election occurs, in any manufacturing, mechanical or mercantile establishment in this Commonwealth, except such establishment as may lawfully conduct its business on the Lord's day, during the period of two hours after the opening of the polls in the town, ward or precinct in which such person is

Time to be allowed for voting of employees in manufacturing, etc., establishments.

**Proviso.** entitled to vote: *provided*, such person shall make application for leave of absence during such time.

**Penalty.** SECT. 2. Every owner, superintendent or overseer in any such establishment who employs or permits to be employed any person in violation of the preceding section shall forfeit not less than twenty nor more than fifty dollars for each offence.

*Approved May 14, 1887.*

## CHAPTER 361.

### AN ACT TO REGULATE FINES FOR IMPERFECT WEAVING.

*Be it enacted, etc., as follows:*

Fines for imperfect weaving regulated.

SECTION 1. No person or corporation shall be entitled, unless under a contract made before the passage of this act, to retain any part of the wages of any weaver in his or its employ by way of fine or deduction for imperfect weaving, except in accordance with a written or printed list of fines posted in a conspicuous place in the weaving-room, nor unless such imperfect weaving was due to the wilfulness, incapacity or negligence of such weaver, nor unless the imperfection was discovered when the cloth was first examined and was shown to such weaver forthwith; nor shall the amount so retained exceed in any case the actual damage or loss caused to the employer by the imperfection.

Notice to be given to employer that action will be brought.

SECT. 2. In an action for the recovery of wages the plaintiff shall not be entitled to take advantage of the provisions of this act unless within three days of the time, when he was notified of the amount of the fine imposed upon him, he gave notice to the employer or his superintendent or overseer that such action would be brought, nor unless such action was actually brought within thirty days of such time.

SECT. 3. This act shall take effect upon its passage.

*Approved June 6, 1887.*

## CHAPTER 422.

### AN ACT TO PREVENT ILLEGAL PEDDLING AND BEGGING BY CERTAIN MINORS.

*Be it enacted, etc., as follows:*

Penalty on parent, etc., for employing

Any parent, or other person, who employs a minor under the age of fifteen years, in peddling without a license, when a

license is required by law, or in begging, or who having the care or custody of such minor permits him to engage in such employment, shall be punished by a fine not exceeding two hundred dollars, or by imprisonment not exceeding six months.

minor to peddle without a license.

*Approved June 16, 1887.*

## CHAPTER 433.

AN ACT RELATING TO THE EMPLOYMENT OF MINORS WHO CANNOT READ AND WRITE IN THE ENGLISH LANGUAGE.

*Be it enacted, etc., as follows :*

SECTION 1. [*This section was repealed by Chap. 348, Acts of 1888.*]

SECT. 2. [*As amended by Chap. 135, Acts of 1889.*] Every person who regularly employs, or permits to be employed, a minor fourteen years of age, or over, who cannot read and write in the English language, providing such minor has been, since reaching the age of fourteen years, for one year continuously a resident of a city or town in this Commonwealth wherein public evening schools are maintained, and is not a regular attendant of a day school, or has not attained an attendance of seventy per cent or more of the yearly session of the evening school, shall, for every such offence, forfeit not less than fifty nor more than one hundred dollars, for the use of the evening schools of such city or town.

Penalty for employing minor, etc., who has not attended school.

SECT. 3. [*As amended by Chap. 48, Acts of 1890.*] Whenever it appears that the labor of any minor who would be debarred from employment under section two of this act and amendments thereto, is necessary for the support of the family to which said minor belongs, or for his own support, the school committee of said city or town may, in the exercise of their discretion, issue a permit authorizing the employment of such minor within such time or times as they may fix : *provided*, such minor make application to said school committee, or some person duly authorized by said committee, for such a permit before the opening of the yearly session of the evening school of said city or town ; and the provisions of said section two shall not apply to such minor so long as said permit is in force ; *provided, also*, that if such minor has been prevented by sickness or injury from attending said evening school, as provided in said section two as amended by chapter one hundred and thirty-five of the acts of the year eighteen hundred and eighty-nine, the school

Employment of minor may be permitted when necessary for support.

Proviso.

committee shall issue to such minor the permit provided for in this section, upon the presentation of the following blank properly filled and signed :

Physician's certificate. *To the School Committee of the* \_\_\_\_\_ :

I hereby certify that I have attended \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_ ; that said \_\_\_\_\_ was sick or injured with \_\_\_\_\_ ; and that said \_\_\_\_\_ was not in suitable physical condition to attend evening school for the term of \_\_\_\_\_ days.

(Signed)

[Dated] \_\_\_\_\_ *Attending Physician.*

School committees to furnish blanks.

The school committee of every city or town in this Commonwealth wherein public evening schools are maintained shall furnish blanks described in the foregoing paragraph upon application.

Notice to be given concerning evening schools.

SECT. 4. Two weeks next before the opening of each term of the evening schools, the school committee shall, by posters posted in three or more public places of said city or town, give notice of the location of said schools, the date of the commencement of the term, the evenings of the week during which said schools shall be kept, the provisions of section two of this act as to forfeiture for non-compliance with said section, and such regulations as to attendance as they shall deem proper.

Repeal.

SECT. 5. Section seven of chapter forty-eight of the Public Statutes is hereby repealed.

To take effect October 1, 1887.

SECT. 6. This act shall take effect on the first day of October in the year one thousand eight hundred and eighty-seven.

*Approved June 16, 1887.*

## CHAPTER 447.

AN ACT RELATING TO THE LABOR OF THE PRISONERS IN THE STATE PRISON, REFORMATORIES AND HOUSES OF CORRECTION.

*Be it enacted, etc., as follows :*

Contracts not to be made for the labor of prisoners in state prison, etc.

SECTION 1. No contract shall hereafter be made for the labor of prisoners confined in the state prison, reformatories or any of the houses of correction ; but such prisoners shall be employed by the warden, superintendent or master of said prison, reformatory or house of correction, under rules and regulations to be established by the general superintendent of prisons, in such industries as shall from time to time be fixed upon by said warden, superintendent or master and the general superintendent. The warden, superintendent or master, under the direction of said general superintendent, shall purchase such

tools and implements as he and they shall consider necessary for carrying on said industries.

SECT. 2. The warden, superintendent or master may employ such number of persons as he and said general superintendent shall consider necessary to superintend and instruct said prisoners in said industries. Such superintendents and instructors shall have the same authority in relation to the prisoners which is possessed by the subordinate officers of said prison, reformatory or house of correction. The compensation of said superintendents and instructors shall be fixed by the warden, superintendent or master, with the approval of the said general superintendent. They shall be appointed and may be removed by the warden, superintendent or master, with the approval of the said general superintendent.

Employment of instructors.

SECT. 3. The bills for tools, implements and materials purchased, together with the salaries of persons employed under this act in the state prison and reformatories, shall be paid monthly from the treasury of the Commonwealth upon schedules prepared and sworn to by the warden or superintendent and approved by the general superintendent of prisons. The schedules of bills for materials and salaries shall be separate from those for tools and implements, and both such schedules shall be separate from the schedules of bills incurred for the maintenance of the prison or reformatory.

Tools, implements and materials used in state prison and reformatories to be paid for by the state.

SECT. 4. The bills for tools, implements and materials purchased, together with the salaries of persons employed under this act in the houses of correction, shall be paid monthly from the county treasury upon schedules prepared and sworn to by the master and approved by the general superintendent of prisons. The schedules of bills for materials and salaries shall be separate from those for tools and implements, and both such schedules shall be separate from the schedules of bills incurred for the maintenance of the house of correction.

Tools, implements, etc., used in house of correction to be paid for by the county.

SECT. 5. No new machinery to be propelled by other than hand or foot power shall be used in any such institution.

New machinery and motive power.

SECT. 6. The governor shall appoint, by and with the advice and consent of the council, as soon after the passage of this act as may be, a suitable and discreet person, who shall be known and designated as the general superintendent of prisons. He shall hold and continue in office at the discretion of the governor, and receive such compensation as may be determined by the governor and council.

General superintendent of prisons to be appointed.

SECT. 7. It shall be the duty of the general superintendent aforesaid to establish and maintain in the state prison, reforma-

Duties of superintendent.



tories and the houses of correction in the Commonwealth, such industries as may, from time to time, be determined upon by him and the warden, superintendent or master.

Number of prisoners employed in a single industry limited.

SECT. 8. The number of prisoners employed in a single industry at the same time in any institution, shall not exceed one-twentieth of the number of persons employed in such industry in the state, according to the classification given in the last census preceding such employment, unless such number is necessary to produce materials to be supplied in state and county institutions as provided in section thirteen hereof: *provided, however*, that county institutions now doing business on public account may continue such industries as are now maintained therein, but not more than two hundred and fifty prisoners shall be employed in any one industry at the same time.

Proviso.

Purchase of materials and sale of manufactured goods.

SECT. 9. The general superintendent or the warden or master under his supervision shall purchase the materials to be used in manufacturing as aforesaid, and sell such manufactured goods as shall be produced in the prison, reformatory or house of correction. All moneys received for such sales to be paid by the purchasers to the respective institutions from which the goods are delivered.

Payments into the state treasury.

SECT. 10. The warden and superintendent shall pay into the treasury of the Commonwealth, whenever he shall have in his possession as great a sum as ten thousand dollars, and in all cases as often as once in each month, all moneys received under the provisions of this act.

Payments to county treasurers.

SECT. 11. The master of any house of correction shall pay into the treasury of the county, whenever he shall have in his possession as great a sum as five thousand dollars, and in all cases as often as once in each month, all moneys received under the provisions of this act.

Warden, etc., may sue and be sued.

SECT. 12. The warden, superintendent or master or their successors, may sue upon any sale or be sued upon any purchase made under the provisions of this act. No such suit shall abate by reason of the office of the warden, superintendent or master becoming vacant; but any successor of the warden, superintendent or master, pending such suit, shall take upon himself the prosecution or defence thereof, and upon motion of the adverse party and notice he shall be required to do so.

Differences may be referred to arbitrators or referees.

When a controversy arises respecting any purchase or sale made under this act, or a suit is pending thereon, the warden, superintendent or master may submit the same to the final determination of arbitrators or referees, to be approved by the governor.

SECT. 13. The general superintendent shall, as far as may be, have manufactured in the state prison, reformatories and houses of correction such articles as are in common use in the several state and county institutions. He shall, from time to time, notify the officers of such institutions, having charge of the purchase of supplies, of such goods as he has remaining in hand, and said officers shall, as far as may be, purchase of said articles as are necessary to the maintenance of the institutions which they may represent. The articles manufactured in said prison, reformatory or house of correction shall be sold at the wholesale market price of goods of like kind and grade.

Articles in common use in prisons, etc., to be manufactured.

SECT. 14. The general superintendent of prisons shall make an annual report in December, in which he shall state what industries have been carried on in said prison, reformatory or house of correction during the year, the number of prisoners employed in each, giving the highest and lowest number at any one time, the kind and quantity of goods manufactured, the amount thereof sold to such institutions and otherwise, and the prices received therefor.

General superintendent to make annual report.

SECT. 15. The general superintendent shall before entering upon the duties of his office give bond, with satisfactory sureties, in such sum as shall be fixed by the governor and council.

To give bond.

SECT. 16. Any existing contract for the labor of the prisoners in said prison, reformatory or house of correction, which, by the terms thereof, may be terminated by the warden, superintendent or county commissioners, upon notice, shall be terminated by the warden, superintendent or county commissioners, by giving, within ninety days after the confirmation of said general superintendent, the notice provided for in such contract.

Contracts to be terminated where terms thereof permit.

SECT. 17. This act shall take effect on the first day of November next.

To take effect Nov. 1, 1887.

*Approved June 16, 1887.*

## ACTS OF 1888.

### CHAPTER 22.

AN ACT TO DEFINE THE MEANING OF THE WORDS "CONTRACT FOR THE LABOR OF PRISONERS," AS USED IN CHAPTER FOUR HUNDRED AND FORTY-SEVEN OF THE ACTS OF THE YEAR EIGHTEEN HUNDRED AND EIGHTY-SEVEN.

*Be it enacted, etc., as follows:*

SECTION 1. The words "contract for the labor of prisoners," used in chapter four hundred and forty-seven of the acts of the year eighteen hundred and eighty-seven, shall not be construed

Contract for the labor of prisoners.

as applying to a contract for the manufacture of articles by the piece, under what is known as the "piece price system," with persons who furnish the materials used in such manufacture.

SECT. 2. This act shall take effect upon its passage.

*Approved February 9, 1888.*

## CHAPTER 92.

### AN ACT TO INCORPORATE THE WORKINGMEN'S BUILDING ASSOCIATION.

*Be it enacted, etc, as follows:*

Workingmen's  
Building Asso-  
ciation incorpo-  
rated.

SECTION 1. Robert Treat Paine, Charles W. Dexter, John S. Blatchford, Francis C. Foster, J. D. W. French, I. W. Clarke, G. W. Pope, Robert Treat Paine, 2d, Thomas T. Stokes and Henry R. Gardner, their associates and successors, are hereby made a corporation for the term of thirty years by the name of The Workingmen's Building Association, in the city of Boston, to hold and improve real estate in said city for the purpose of erecting, maintaining, leasing and improving homes for working people, and others of moderate means, and of promoting the adoption of improved modes of building and the enforcement of sanitary regulations calculated to secure the comfortable and healthful condition of structures so occupied, subject to the provisions of chapters one hundred and five and one hundred and six of the Public Statutes, and to all general laws which now are or may hereafter be in force relating to such corporations.

May buy and  
sell real estate.

SECT. 2. Said corporation shall have power to buy, sell and hold real estate for the purposes aforesaid.

Capital stock  
and shares.

SECT. 3. The capital stock of said corporation shall not exceed two hundred and fifty thousand dollars to be divided into shares each of the par value of twenty-five dollars, and the dividends on said shares shall not exceed six per cent per annum on the par value thereof.

Surplus to be  
used as a sink-  
ing fund, etc.

SECT. 4. Any surplus accumulated by said corporation shall be used as a sinking or reserved fund, or in improving the condition, or in increasing the number, or the extent and capacity of the buildings occupied for such homes: *provided, however,* that the rentals from all the property owned by said corporation shall be limited to such rates as will after paying six per cent for every year maintain said sinking or reserve fund at a sum not exceeding fifty thousand dollars.

Proviso.

SECT. 5. This act shall take effect upon its passage.

*Approved March 6, 1888.*

## CHAPTER 108.

## AN ACT TO INCORPORATE THE WORKINGMEN'S LOAN ASSOCIATION.

*Be it enacted, etc., as follows :*

SECTION 1. Robert Treat Paine, Charles W. Dexter, John S. Blatchford, Francis C. Foster, John D. W. French, I. Wells Clarke, George W. Pope, Charles H. Washburn, Robert Treat Paine, 2d, Thomas T. Stokes and Henry R. Gardner, their associates and successors, are hereby made a corporation by the name of the Workingmen's Loan Association, to be located at Boston, for the purpose of loaning money upon pledge or mortgage of goods and chattels or of safe securities of every kind, or upon mortgage of real estate; and all the powers and privileges necessary for the execution of these purposes are granted, with all the powers and privileges and subject to all the duties, restrictions and liabilities set forth in chapter one hundred and five of the Public Statutes, and in all the general laws which now are or hereafter may be in force in relation to such corporations.

Workingmen's  
Loan Association  
incorporated.

Powers and  
duties.

SECT. 2. The capital stock of said corporation shall be twenty-five thousand dollars, to be divided into shares of one hundred dollars each, and to be paid for at such times and in such manner as the board of directors shall decide, provided that no business shall be transacted by said corporation until said amount of twenty-five thousand dollars is subscribed for and actually paid in; and no certificate of shares shall be issued until the par value of such shares shall have actually been paid in, in cash. The said corporation may increase its capital stock from time to time until the same amounts to five hundred thousand dollars.

Capital stock  
and shares.

SECT. 3. Said corporation is hereby authorized to borrow money on its own notes not exceeding the amount of its capital paid in, and for periods not exceeding one year.

May borrow  
money, not ex-  
ceeding amount  
of capital paid  
in.

SECT. 4. The government of said corporation shall be in a board of directors, chosen as the by-laws may prescribe, conformably to law, provided however, that one director shall be appointed by the governor of the Commonwealth and one shall be appointed by the mayor of the city of Boston.

Directors to be  
chosen as by-  
laws prescribe.

SECT. 5. All loans shall be for a time fixed, and not more than one year, and the mortgagor or pledgor shall have a right to redeem his property mortgaged or pledged at any time before it is sold, in pursuance of the contract between the parties, or

Loans to be for  
a time fixed, and  
not more than  
one year.

before the right of redemption is foreclosed, on payment of the loan and rate of compensation to the time of the offer to redeem.

Article pledged, name, rate of compensation, etc., to be inscribed upon a card furnished.

SECT. 6. The corporation shall give to each pledgor a card inscribed with the name of the corporation, the article or articles pledged, the name of the pledgor, the amount of the loan, the rate of compensation, the date when made, the date when payable, and the page of the book where recorded.

To be under supervision of the commissioners of savings banks.

SECT. 7. The commissioners of savings banks shall have access to the vaults, books and papers of the company, and it shall be their duty to inspect, examine and inquire into its affairs, and to take proceedings in regard to them in the same manner and to the same extent as if this corporation was a savings bank subject to all the general laws which are now or hereafter may be in force relating to such institutions in this regard. The returns required to be made to the commissioners of savings banks shall be in the form of a trial balance of its books, and shall specify the different kinds of its liabilities and the different kinds of its assets, stating the amounts of each kind, in accordance with a blank form to be furnished by said commissioners; and these returns shall be published in a newspaper of the city of Boston, at the expense of said corporation, at such times and in such manner as may be directed by said commissioners, and in the annual report of said commissioners; *provided, however*, that said commissioners may cause any examination to be made by an expert under their direction, but at the expense of the corporation.

*Approved March 8, 1888.*

Proviso.

## CHAPTER 113.

### AN ACT TO DIVIDE THE DISTRICT POLICE FORCE INTO TWO DEPARTMENTS.

*Be it enacted, etc., as follows:*

District police force divided into two departments.

The district police force is hereby divided into two departments, which shall be known respectively as the inspection department and the detective department of said force. The inspection department shall consist of the ten members of said force now appointed according to law to act as inspectors of factories and public buildings, together with the chief of said force; the detective department shall consist of the remaining eleven members of said force, together with said chief. The chief of said district police force shall be the head of each of

said departments. No member of the inspection department of said district police force shall be called upon to perform any other duties than those pertaining to the office of inspector of factories and public buildings, unless his services are commanded by the governor as provided by law in suppressing riots and in preserving the peace ; but the members of said inspection department shall continue to have and exercise all powers now given by law to members of said district police force. Vacancies in either of said departments shall be filled by appointment to the department in which the vacancy occurs.

*Approved March 8, 1888.*

## CHAPTER 134.

### AN ACT TO AUTHORIZE THE INCORPORATION OF LABOR OR TRADE ORGANIZATIONS.

*Be it enacted, etc., as follows :*

SECTION 1. Seven or more persons within this Commonwealth, who associate themselves together by such an agreement in writing as is described in section three of chapter one hundred and fifteen of the Public Statutes, with the intention of forming a corporation for the purpose of improving in any lawful manner the condition of any employees in any one or more lawful trades or employments, either in respect to their employment, or by the promotion of education, temperance, morality or social intercourse, by the payment of benefits to members when sick or unemployed, or to persons dependent upon deceased members, or otherwise, shall, upon complying with the provisions of said chapter one hundred and fifteen of the Public Statutes and of this act, be and remain a corporation. The provisions of said chapter, so far as not inconsistent with this act, shall apply to corporations formed under this act.

Labor or trade organizations may become incorporated.

SECT. 2. The commissioner of corporations shall not endorse his approval upon the certificate of organization of any corporation formed under this act unless satisfied that the agreement of association shows that the purpose of such corporation is a lawful one, nor unless satisfied that its by-laws contain no provision contrary to law, and such commissioner may call for the opinion of the attorney-general thereon ; nor shall such commissioner so endorse his approval unless satisfied that the by-laws conform to the requirements of the two following sections of the act.

Endorsement of certificate of organization by commissioner of corporations.

Certain by-laws  
to be estab-  
lished.

SECT. 3. The by-laws of every corporation formed under this act shall contain clear and distinct provisions in respect to the following matters: the manner of electing or admitting new members; the manner of expelling members; the officers of the corporation, with their respective titles, duties, powers and terms of office; the manner of electing and removing such officers; the number of members required to constitute a quorum for the transaction of business; the manner of calling special meetings of the corporation; the manner of rescinding or amending by-laws and making new ones; the purposes for which the funds of the corporation shall be applicable; the purposes for which assessments may be laid upon members: the conditions under which a member or persons dependent on a deceased member, shall be entitled to benefits, if any are to be given by the corporation; the manner in which a fine or forfeiture can be imposed upon a member, if any are to be imposed by the corporation; the manner in which the funds of the corporation are to be held, deposited or invested; the manner in which the accounts of the treasurer are to be periodically audited; and the manner of voting upon shares of stock, if any capital stock is to be issued by the corporation.

Amendment of  
by-laws.

SECT. 4. No by-law of a corporation formed under this act shall be rescinded or amended, and no new by-law shall be made unless notice of such proposed action has been given at a previous meeting of the corporation, and no such rescinding, amendment or new by-law shall take effect until approved by the commissioner of corporations as not inconsistent with the provisions of this act. No member of such corporation shall be expelled by vote of less than a majority of all the members thereof, nor by vote of less than three-quarters of the members present and voting upon such expulsion. Every member of such corporation and every person having an interest in its funds shall be entitled to examine its books and records.

SECT. 5. This act shall take effect upon its passage.

*Approved March 14, 1888.*

## CHAPTER 316.

### AN ACT TO REGULATE THE ERECTION AND CONSTRUCTION OF CERTAIN BUILDINGS.

*Be it enacted, etc., as follows:*

Regulations for  
the construction  
of public build-

SECTION 1. No building designed to be used in whole or in part, as a public building, public or private institution, school-

house, church, theatre, public hall, place of assemblage or place of public resort, and no building more than two stories in height designed to be used above the second story, in whole or in part, as a factory, workshop or mercantile or other establishment and having accommodations for ten or more employees above said story, and no building more than two stories in height designed to be used above the second story, in whole or in part, as a hotel, family hotel, apartment house, boarding house, lodging house or tenement house and having ten or more rooms above said story, shall hereafter be erected, unless in process of erection at the date of the passage of this act, until a copy of the plans of such building has been deposited with the inspector of factories and public buildings for the district in which such building is to be located, if outside of the city of Boston, or with the inspector of buildings of the city of Boston, if within said city, together with a copy of such portion of the specifications of such building as such inspector may require, nor shall any such building be so erected without the provision of sufficient ways of egress and other means of escape from fire, properly located and constructed; the certificate of the inspector above named endorsed, if the building is to be located outside of the city of Boston, with the approval of the chief of the district police force, shall be conclusive evidence of a compliance with the provisions of this act, provided that after the granting of such certificate no change is made in the plans or specifications of such ways of egress and means of escape unless a new certificate is obtained therefor. Such inspector may require that proper fire stops shall be provided in the floors, walls and partitions of such buildings and may make such further requirements as may be necessary or proper to prevent the spread of fire therein or its communication from any steam boiler or heating apparatus; and no pipe for conveying hot air or steam in such building shall be placed nearer than one inch to any wood-work unless protected to the satisfaction of such inspector by suitable guards or casings of incombustible material, and no wooden flue or air-duct for heating or ventilating purposes shall be placed in any such building.

ings, theatres,  
schoolhouses,  
public halls,  
hotels, etc.

Powers and  
duties of the  
inspector.

SECT. 2. Any person erecting or constructing a building in violation of the provisions of this act shall be punished by fine of not less than fifty nor more than one thousand dollars, and such erection or construction may be enjoined in a proceeding to be had before the superior or supreme judicial court at the instance of the inspector above named, and upon the filing of a petition for such injunction any justice of the court in which

Penalty for  
violation of the  
provisions of  
this act.



such proceeding is pending may issue a temporary injunction or restraining order, as provided in proceedings in equity.

To take effect  
Oct. 1, 1888.

SECT. 3. This act shall take effect on the first day of October in the year one thousand eight hundred and eighty-eight.

*Approved May 9, 1888.*

## CHAPTER 348.

### AN ACT IN RELATION TO THE EMPLOYMENT OF CHILDREN.

*Be it enacted, etc., as follows :*

Child under thirteen years not to be employed in factories, etc. No such child to be employed for wages during public school hours, etc.

SECTION 1. No child under thirteen years of age shall be employed at any time in any factory, workshop or mercantile establishment. No such child shall be employed in any indoor work, performed for wages or other compensation, to whomsoever payable, during the hours when the public schools of the city or town in which he resides are in session, or shall be employed in any manner during such hours unless during the year next preceding such employment he has attended school for at least twenty weeks as required by law.

Child under fourteen years not to be employed before six A.M. or after seven P.M. Such child not to be employed in a factory, etc., except during vacation of public schools, etc.

SECT. 2. No child under fourteen years of age shall be employed in any manner before the hour of six o'clock in the morning or after the hour of seven o'clock in the evening. No such child shall be employed in any factory, workshop or mercantile establishment, except during the vacation of the public schools in the city or town where he resides, unless the person or corporation employing him procures and keeps on file a certificate and employment ticket for such child as prescribed by section four of this act, and no such child shall be employed in any indoor work, performed for wages or other compensation, to whomsoever payable, during the hours when the public schools of such city or town are in session, unless as aforesaid, or shall be employed in any manner during such hours unless during the year next preceding such employment he has attended school for at least twenty weeks as required by law ; and such employment shall not continue in any case beyond the time when such certificate expires. The chief of the district police, with the approval of the governor, shall have authority to designate any kind or kinds of employment in factories, workshops or mercantile establishments as injurious to the health of children under fourteen years of age employed therein, and after one week's written notice from the said chief to the employer or his superintendent, overseer or other agent of such designation no such child shall be employed in any such kind or

Duty of chief of the district police.

kinds of employment in any factory, workshop or mercantile establishment.

SECT. 3. No child under sixteen years of age shall be employed in any factory, workshop or mercantile establishment unless the person or corporation employing him procures and keeps on file the certificate required in the case of such child by the following section, and also keeps on file a full and complete list of such children employed therein.

When child under sixteen years may be employed.

SECT. 4. The certificate of a child under fourteen years of age shall not be signed until he presents to the person authorized to sign the same an employment ticket, as hereinafter prescribed, duly filled out and signed. The certificate and the employment ticket shall be separately printed, and shall be in the following forms respectively, and the blanks therein shall be filled out and signed as indicated by the words in brackets:—

Certificate of child under fourteen years not to be signed until employment ticket is presented.

#### EMPLOYMENT TICKET, LAW OF 1888.

When [name of child], height [feet and inches], complexion [fair or dark], hair [color], presents a certificate duly signed, I intend to employ [him or her].

Employment ticket.

[Signature of intending employer or agent.]

[Town or city and state.]

#### AGE AND SCHOOLING CERTIFICATE, LAW OF 1888.

This certifies that I am the [father, mother or guardian] of [name of child], and that [he or she] was born at [name of town or city], in the county of [name of county, if known], and state [or country] of [name], on the [day and year of birth], and is now [number of years and months] old.

Age and schooling certificate.

[Signature of father, mother or guardian.]

[Town or city and date.]

Then personally appeared before me the above named [name of person signing] and made oath that the foregoing certificate by [him or her] signed is true to the best of [his or her] knowledge and belief. I hereby approve the foregoing certificate of [name of child], height [feet and inches], complexion [fair or dark], hair [color], having no sufficient reason to doubt that [he or she] is of the age therein certified.

Age and schooling certificate.

[Signature of person authorized to sign, with official character or authority.]

[Town or city and date.]

In case the age of the child is under fourteen, the certificate shall continue as follows, after the word "certified":— And I hereby certify that [he or she] can read at sight, and can write

legibly, simple sentences in the English language, and that [he or she] has attended the [name] public [or private] day school according to law for [number of weeks, which must be at least twenty] weeks during the year next preceding this date, and that the last twenty weeks of such attendance began [date]. This certificate expires [date, one year later than above date].

[Signature of the person authorized to sign, with official character or authority.]

If attendance has been at a private school, also signature of a teacher of such school, followed by words, — certifying to school attendance.

[Town or city and date.]

In case a child cannot read and write as above stated, the following may be substituted for the clause beginning "and I hereby certify" through to and including the word "language": "and I hereby certify that [he or she] is a regular attendant at the [name] public evening school"; but in such case the certificate shall only continue in force for as long a time as attendance of such child at such evening school is endorsed weekly during the session of such evening school, not exceeding the length of the public school year minus twenty weeks in place of attendance at day school as now provided by law, with a statement from a teacher thereof certifying that his attendance continues regular. If attendance has been at a half-time school, forty weeks of such attendance must be certified to instead of twenty. The foregoing certificate must be filled out in duplicate, and one copy thereof shall be kept on file by the school committee. Any explanatory matter may be printed with such certificate in the discretion of the school committee or superintendent of schools.

By whom  
schooling cer-  
tificate to be  
signed.

Provided.

SECT. 5. In cities and towns having a superintendent of schools, said certificate shall be signed only by such superintendent, or by some person authorized by him in writing; in other cities and towns it shall be signed by some member or members of the school committee authorized by vote thereof: *provided, however*, that no member of a school committee, or other person authorized as aforesaid, shall have authority to sign such certificate for any child then in, or about to enter, his own employment, or the employment of a firm of which he is a member, or of a corporation of which he is an officer or employee. The person signing the certificate shall have authority to administer the oath provided for therein, but no fee shall be charged therefor; such oath may also be administered by any justice of the peace.

SECT. 6. The certificate as to the birthplace and age of a child shall be signed by his father if living and a resident of the same city or town; if not, by his mother; or if his mother is not living, or if living is not a resident of the same city or town, by his guardian; if a child has no father, mother or guardian living in the same city or town, his own signature to the certificate may be accepted by the person authorized to approve the same.

Certificate of age to be signed by father, etc.

SECT. 7. [*As amended by Chap. 291, Acts of 1889.*] No child who has been continuously a resident of a city or town since reaching the age of thirteen years shall be entitled to receive a certificate that he has reached the age of fourteen unless or until he has attended school according to law in such city or town for at least twenty weeks since reaching the age of thirteen, unless such child can read at sight and write legibly simple sentences in the English language or is exempted by law from such attendance. Before signing the approval of the certificate of age of a child, the person authorized to sign the same shall refer to the last school census taken under the provisions of section three of chapter forty-six of the Public Statutes, and if the name of such child is found thereon, and there is a material difference between his age as given therein and as given by his parent or guardian in the certificate, allowing for lapse of time, or if such child plainly appears to be of materially less age than that so given, then such certificate shall not be signed until a copy of the certificate of birth or of baptism of such child, or a copy of the register of its birth with a town or city clerk, has been produced, or other satisfactory evidence furnished that such child is of the age stated in the certificate.

Provisions in case child has been continuously a resident since reaching age of thirteen.

SECT. 8. The truant officers may, when so authorized and required by vote of the school committee, visit the factories, workshops and mercantile establishments in their several cities and towns, and ascertain whether any children under the age of fourteen are employed therein contrary to the provisions of this act, and they shall report any cases of such illegal employment to the school committee and to the chief of the district police or the inspector of factories for the district. The inspectors of factories, and the truant officers when authorized as aforesaid, may demand the names of all children under sixteen years of age employed in such factories, workshops and mercantile establishments, and may require that the certificates and lists of such children provided for in this act shall be produced for their inspection. Such truant officers shall inquire into the

Truant officers, duly authorized, may visit factories, etc.

Inspectors of factories may demand names of children there employed, under sixteen years.

employment, otherwise than in such factories, workshops and mercantile establishments, of children under the age of fourteen years, during the hours when the public schools are in session, and may require that the aforesaid certificates of all children under sixteen shall be produced for their inspection; and any such officer, or any inspector of factories, may bring a prosecution against a person or corporation employing any such child, otherwise than as aforesaid, during the hours when the public schools are in session, contrary to the provisions of this act, if such employment still continues one week after written notice from such officer or inspector that such prosecution will be brought, or if more than one such written notice, whether relating to the same child or to any other child, has been given to such employer by a truant officer or inspector of factories at any time within one year.

Penalty for permitting employment of, or giving employment to, a child contrary to this act.

SECT. 9. Every parent or guardian of a child under fourteen years of age who permits any employment of such child contrary to the provisions of this act, and every owner, superintendent or overseer of any factory, workshop or mercantile establishment who employs or permits to be employed therein any child contrary to the provisions of this act, and any other person who employs any child contrary to the provisions of this act, shall for every such offence forfeit not less than twenty nor more than fifty dollars for the use of the public schools of the city or town. Every parent, guardian, or person authorized to sign the certificate prescribed by section four of this act, who certifies to any materially false statement therein, shall be punished by fine not exceeding fifty dollars, or by imprisonment not exceeding thirty days, or by both such fine and imprisonment. A failure to produce to a truant officer or inspector of factories the certificate required by the provisions of this act shall be *prima facie* evidence of the illegal employment of the child whose certificate is not produced.

Definition of the words "factory" and "workshop."

SECT. 10. The expressions "factory" and "workshop" used in this act shall have the meanings defined for them respectively by chapter one hundred and three of the acts of the year one thousand eight hundred and eighty-seven.

Printed copies of act to be transmitted to school committees.

SECT. 11. Within one month of the passage of this act the chief of the district police shall cause a printed copy thereof to be transmitted to the school committee of every city and town in the Commonwealth.

Repeal.

SECT. 12. Sections one to six, inclusive, of chapter forty-eight of the Public Statutes, chapter two hundred and twenty-four of the acts of the year eighteen hundred and eighty-three,

chapter two hundred and twenty-two of the acts of the year eighteen hundred and eighty-five, and section one of chapter four hundred and thirty-three of the acts of the year eighteen hundred and eighty-seven are hereby repealed.

SECT. 13. This act shall take effect on the first day of July in the year one thousand eight hundred and eighty-eight.

To take effect  
July 1, 1888.

*Approved May 17, 1888.*

## CHAPTER 403.

### AN ACT IN RELATION TO THE LABOR OF PRISONERS.

*Be it enacted, etc., as follows :*

SECTION 1. It shall be the duty of the warden of the state prison, the superintendent of the Massachusetts reformatory, the superintendent of the reformatory prison for women, and the masters of the several houses of correction, to establish and maintain in their respective institutions such industries as shall be fixed upon as provided by section one of chapter four hundred and forty-seven of the acts of the year eighteen hundred and eighty-seven.

Certain industries to be maintained in the prisons.

SECT. 2. The number of persons employed in any industry in the state prison, Massachusetts reformatory or reformatory prison for women, or in any house of correction, shall not exceed one-twentieth of the number of persons employed in such industry in the state, according to the classification given in the census of eighteen hundred and eighty, unless a larger number is needed to produce articles to be supplied to state and county institutions, as provided in section thirteen of said chapter. If said classification does not give the number employed in any industry in the state, the limit to the number who may be so employed in any institution in any industry shall be as provided by chapter two hundred and seventeen of the acts of the year eighteen hundred and eighty-three: *provided, however*, that two hundred and fifty prisoners may be employed in the manufacture of brushes at the house of correction at Cambridge, upon the public account system, so called.

Number of prisoners to be employed, limited.

*Provido.*

SECT. 3. The tools, implements and materials needed for use in manufacturing in any institution under the provisions of said chapter four hundred and forty-seven of the acts of the year eighteen hundred and eighty-seven shall be purchased by the warden, superintendent or master of said institution, under the supervision of the general superintendent of prisons, after estimates or requisitions, in such form as said general superin-

Tools, implements and materials to be purchased under supervision of the general superintendent.

tendent shall from time to time require, shall have been approved by him. Such manufactured goods as shall be produced in either of said institutions shall be sold by the principal officer thereof, under such approval of said general superintendent as he shall from time to time require. Said warden, superintendent or master is authorized to appoint agents who shall, in his behalf, under such rules and regulations as the general superintendent shall from time to time establish, purchase tools, implements and materials, and sell manufactured goods as aforesaid. The appointment of every such agent shall be subject to the approval of the general superintendent of prisons, but he may be removed at any time without such approval by the officer who appointed him. The compensation of every such agent shall be fixed from time to time by the officer by whom he is appointed, with the approval of said general superintendent. Said general superintendent shall have no authority to purchase or sell any articles for any institution.

Appointment of agent for sale of goods subject to approval of general superintendent.

Amendment to 1887, 447, § 12.

SECT. 4. Section twelve of said chapter four hundred and forty-seven is hereby amended by inserting the words: — by him, — after the word “made” in the third line, and by adding at the end of the section the following words: — or if such suit is prosecuted or defended by a master of a house of correction, to arbitrators or referees to be approved by the county commissioners of the county in which said house of correction is established, — so that it will read as follows: — *Section 12.* The warden, superintendent or master, or their successors, may sue upon any sale or be sued upon any purchase made by him under the provisions of this act. No such suit shall abate by reason of the office of the warden, superintendent or master becoming vacant; but any successor of the warden, superintendent or master, pending such suit, shall take upon himself the prosecution or defence thereof, and upon motion of the adverse party and notice he shall be required to do so. When a controversy arises respecting any purchase or sale made under this act, or a suit is pending thereon, the warden, superintendent or master may submit the same to the final determination of arbitrators or referees, to be approved by the governor, or, if such suit is prosecuted or defended by a master of a house of correction, to arbitrators or referees appointed by the county commissioners of the county in which said house of correction is established.

Employment upon the piece-price plan subject to approval of general superintendent.

SECT. 5. No provision shall be made for the employment of prisoners upon the piece-price plan, as authorized by chapter twenty-two of the acts of the current year, except with the approval of the general superintendent of prisons.

SECT. 6. Section seventeen and eighteen of chapter two hundred and nineteen of the Public Statutes, and section seven of chapter four hundred and forty-seven of the acts of the year eighteen hundred and eighty-seven are hereby repealed.

SECT. 7. Sections fifty-four and fifty-five of chapter two hundred and twenty-one of the Public Statutes are hereby amended by striking out so much thereof as requires the approval by the commissioners of prisons of bills incurred in carrying out the provisions of said chapter four hundred and forty-seven, in the state prison and reformatory prison for women, and so much as requires that contracts for the labor of prisoners in said institutions shall be approved by the commissioners of prisons and by the governor and council. Section twenty-eight of chapter two hundred and fifty-five of the acts of the year eighteen hundred and eighty-four is hereby amended by striking out the following words, "The said commissioners shall, with the superintendent, cause provision to be made for the employment of the prisoners; but no such provision shall be made without the approval of the governor and council"; also by striking out the words "the said commissioners shall endeavor to establish in said reformatory such industries as will enable prisoners employed therein to learn valuable trades", and inserting in place thereof the following words:—The superintendent of said reformatory, and the general superintendent of prisons, shall endeavor to establish in said reformatory such industries, within the provisions of the requirements of chapter four hundred and forty-seven of the acts of the year eighteen hundred and eighty-seven, as will enable prisoners employed therein to learn valuable trades. Section thirty of said chapter is amended by striking out so much thereof as requires the approval, by the commissioners of prisons, of bills incurred in carrying out the provisions of said chapter four hundred and forty-seven in said reformatory.

SECT. 8. So much of chapter two hundred and twenty of the Public Statutes as gives to the county commissioners or to the board of directors of public institutions of the city of Boston any authority or control over matters connected with the employment of prisoners in any house of correction is hereby repealed, and all such authority and control is hereby vested in the general superintendent of prisons and the master of such house of correction.

SECT. 9. Three hundred copies of the report of the general superintendent shall be printed annually for his use.

Three hundred copies of report for superintendent.

SECT. 10. This act shall take effect upon its passage.

*Approved May 24, 1888.*

Amendments to P. S. 221, §§ 54, 55; 1884, 255, § 28; 1887, 447.

Amendment to P. S. 220.



## CHAPTER 426.

## AN ACT IN RELATION TO WAYS OF EGRESS AND MEANS OF ESCAPE FROM FIRE IN CERTAIN BUILDINGS.

*Be it enacted, etc., as follows :*

Public buildings, theatres, etc., to have proper ways of egress or other means of escape from fire.

SECTION 1. Every building now or hereafter used, in whole or in part, as a public building, public or private institution, schoolhouse, church, theatre, public hall, place of assemblage or place of public resort, and every building in which ten or more persons are employed above the second story in a factory, workshop or mercantile or other establishment, and every hotel, family hotel, apartment house, boarding house, lodging house or tenement house in which ten or more persons lodge or reside above the second story, and every factory, workshop, mercantile or other establishment the owner, lessee or occupant of which is notified in writing by the inspector hereinafter mentioned that the provisions of this act are deemed by him applicable thereto, shall be provided with proper ways of egress, or other means of escape from fire, sufficient for the use of all persons accommodated, assembling, employed, lodging or residing in such building; and such ways of egress and means of escape shall be kept free from obstruction, in good repair and ready for use. Every room above the second story in any such building in which ten or more persons are employed shall be provided, if the inspector mentioned in the following section shall so direct in writing, with more than one way of egress by stairways on the inside or outside of the building, placed as near as practicable at opposite ends of such room; stairways on the outside of the building shall have suitable railed landings at each story above the first, and shall connect with each story by doors or windows; and such landings, doors and windows shall be kept clear of ice and snow and other obstructions. Women or children shall not be employed in a factory, workshop or mercantile or other establishment, in a room above the second story from which there is only one way of egress, if the inspector mentioned in the following section shall so direct in writing. All doors and windows in any building subject to the provisions of this section shall open outwardly if the inspector mentioned in the following section shall so direct in writing. No portable seats shall be allowed in the aisles or passageways of such building during any service or entertainment held therein. The proscenium or curtain opening of all theatres shall have a fire resisting curtain of some incombustible mate-

Doors and windows to open outwardly if inspector so directs.

Curtain opening of theatres to have a fire

rial, and such curtain shall be properly constructed and shall be operated by proper mechanism; the certificate of the inspector mentioned in the following section shall be conclusive evidence of a compliance with such requirements.

resisting curtain  
of some incombustible material.  
1888, 207.

SECT. 2. It shall be the duty of such inspectors of factories and public buildings, as may be assigned to such duty by the chief of the district police force, to examine, as soon as may be after the passage of this act, and thereafter from time to time, all buildings within his district subject to the provisions of this act, and it shall be the duty of the inspector of buildings of the city of Boston so to examine all such buildings within said city. In case any such building conforms in the judgment of such inspector, to the requirements of this act, he shall issue to the owner, lessee or occupant of such building, or of any portion thereof used as above mentioned in section one, a certificate to that effect, specifying the number of persons for whom the ways of egress or means of escape from fire are deemed to be sufficient. Such certificate shall be conclusive evidence, as long as it continues in force, of a compliance on the part of the person to whom it is issued with the provisions of this act. But such certificate shall be of no effect in case a greater number of persons than therein specified are accommodated or employed, or assemble, lodge or reside within such building or portion thereof, or in case such building is used for any purposes materially different from those for which it was used at the time of the granting thereof, or in case the internal arrangements of such building are materially altered, or in case any ways of egress or means of escape from fire existing in such building at the time of such granting are stopped up, rendered unavailable or materially changed; and in no case shall such certificate continue in force for more than five years from its date. Such certificate may be revoked by such inspector at any time upon written notice to the person holding the same, or occupying the premises for which it was granted, and shall be so revoked whenever, in his opinion, any conditions or circumstances have so changed that the existing ways of egress and means of escape are no longer proper and sufficient. A copy of the said certificate shall be kept posted in a conspicuous place upon every floor of such building by the person occupying the premises covered thereby.

Inspectors of  
factories, etc.,  
assigned to such  
duty by chief of  
the district  
police, to ex-  
amine buildings,  
etc., subject to  
provisions of  
this act.

Certificate to be  
issued to owner,  
etc., of building  
conforming to  
requirements.

Certificate may  
be revoked.

SECT. 3. Upon an application being made to an inspector for the granting of a certificate under this act, he shall issue to the person making the same an acknowledgment that such certificate has been applied for, and pending the granting or

Application for  
certificate to be  
acknowledged  
by inspector,  
and pending the  
granting or re-

refusal, the acknowledgment to have effect of certificate for ninety days.

refusal of such certificate such acknowledgment shall have for a period of ninety days the same effect as such certificate, and such acknowledgment may be renewed by such inspector with the same effect for a further period not exceeding ninety days. and may be further renewed by the chief of the district police force, until such time as such certificate shall be granted or refused.

Inspector to be notified of any change in building for which certificate has been issued.

SECT. 4. In case any change is made in any premises for which a certificate has been issued under this act, whether in the use thereof or otherwise, such as terminates the effect of such certificate, as above provided in section two, it shall be the duty of the person making the same to give written notice thereof forthwith to the inspector for the district, or to the chief of the district police, if such premises are outside of the city of Boston, or to the inspector of buildings of the city of Boston, if within said city.

Inspector to notify owner if building fails to conform to provisions of this act.

SECT. 5. In case any building or portion thereof subject to the provisions of this act is found by an inspector to fail to conform thereto, or in case any change is made in such building or portion thereof such as terminates the effect of a certificate formerly granted therefor as aforesaid, it shall be the duty of such inspector to give notice in writing to the owner, lessee or occupant of such building, specifying and describing what additional ways of egress or means of escape from fire are necessary in the opinion of such inspector in order to conform to the provisions of this act and to secure the granting of a certificate as aforesaid. Notice to any agent of such owner, lessee or occupant in charge of the premises shall be sufficient notice under this section to such owner, lessee or occupant.

If building is owned, etc., by several persons, either may apply, etc.

SECT. 6. In case any building subject to the provisions of this act is owned, leased or occupied, jointly or in severalty, by different persons, any one of such persons shall have the right to apply to any part of the outside of such building, and to sustain from any part of the outside wall thereof, any way of egress or means of escape from fire specified and described by an inspector as above provided, notwithstanding the objection of any other such owner, lessee or occupant; and any such way of egress or means of escape may project over the highway.

License for use of premises not to issue until certificate has been obtained.

SECT. 7. When a license is required by law or municipal ordinance, in order to authorize any premises to be used for any purpose mentioned in section one, no license for such purpose shall be granted until a certificate for such building or portion thereof shall first have been obtained from an inspector as above provided, and no such license hereafter issued shall

continue in force any longer than such certificate remains in force.

SECT. 8. No wooden flue or air duct for heating or ventilating purposes shall hereafter be placed in any building subject to the provisions of section one of this act, and no pipe for conveying hot air or steam in such building shall be placed, or shall remain placed, nearer than one inch to any woodwork unless protected to the satisfaction of the said inspector by suitable guards or casings of incombustible material.

Wooden flues,  
air ducts, etc.

SECT. 9. Every story above the second of a building subject to the provisions of section one shall be supplied with means of extinguishing fire, consisting either of pails of water or other portable apparatus, or of a hose attached to a suitable water supply and capable of reaching any part of such story; and such means of extinguishing fire shall be kept at all times ready for use and in good condition.

Every story  
above the second  
to be supplied  
with means of  
extinguishing  
fire.

SECT. 10. It shall be the duty of such members of the inspection department of the district police force as may be assigned to such duty by the chief of such force to enforce the provisions of this act outside of the city of Boston, and of the inspector of buildings of the city of Boston to enforce the same within said city, and for such purpose such inspectors shall have the right of access to all parts of any buildings subject to the provisions of this act.

Inspection de-  
partment of the  
district police  
and the inspec-  
tor of buildings  
in Boston to en-  
force provisions.

SECT. 11. Cities may by ordinance provide that the provisions of this act shall apply to any buildings three or more stories in height within their respective limits.

Cities may pro-  
vide that act  
shall apply to  
buildings of  
three or more  
stories.

SECT. 12. It shall be the duty of every owner, lessee or occupant of any building or part thereof subject to this act to cause the provisions thereof to be carried out, and any owner, lessee or occupant failing to observe such provisions shall be subject to a fine of not less than fifty nor more than one thousand dollars; but no prosecution therefor shall be brought until four weeks after written notice from an inspector, as above provided, of the changes necessary to be made in order to conform thereto, nor then if in the meantime such changes have been made in accordance with such notification. Notice to one member of a firm, or to the clerk or treasurer of a corporation, or to the person in charge of the premises, shall be deemed sufficient notice hereunder, and such notice may be given in person or by mail. Any such owner, lessee or occupant shall be liable for all damages caused by his violation of the provisions of this act. Any person using or occupying a building contrary to the provisions of this act may be enjoined from such

Penalty on  
owner, lessee,  
or occupant.

Persons may be  
enjoined by the

courts for using building contrary to provisions.

use or occupation in a proceeding to be had before the superior court or the supreme judicial court at the instance of the inspector, and upon the filing of a petition therefor any judge or justice of the court in which such proceeding is pending may issue a temporary injunction or restraining order, as provided in proceedings in equity.

Ten additional members of the inspection department of the district police may be appointed.

SECT. 13. The governor of the Commonwealth is hereby authorized to appoint from time to time, as may be necessary, not exceeding ten additional members of the inspection department of the district police force, qualified to perform the duties of the members of such department.

SECT. 14. Sections fifteen to twenty inclusive of chapter one hundred and four of the Public Statutes, section two of chapter two hundred and fifty-one of the acts of the year eighteen hundred and eighty-three, chapter three hundred and twenty-six of the acts of the year eighteen hundred and eighty-five, chapter two hundred and seven of the acts of the year eighteen hundred and eighty-eight, and all acts and parts of acts inconsistent herewith, are hereby repealed.

To take effect July 1, 1888.

SECT. 15. This act shall take effect on the first day of July in the year one thousand eight hundred and eighty-eight.

*Approved May 29, 1888.*

## ACTS OF 1889.

### CHAPTER 181.

#### AN ACT TO INCORPORATE THE NATIONAL HOME BUILDING COMPANY.

*Be it enacted, etc., as follows:*

National Home Building Company, incorporated.

SECTION 1. Frank M. Ames, Samuel N. Brown, Richard C. Humphreys, William Atherton, Robert Treat Paine and William P. Fowler, their associates and successors, are hereby made a corporation by the name of the National Home Building Company, for the purposes hereinafter set forth; said corporation to have its place of business in the city of Boston.

Capital stock and shares.

SECT. 2. The capital stock of such company shall not exceed two hundred and fifty thousand dollars, and shall be divided into shares of the par value of twenty-five dollars each, to be paid in at such times and in such manner as the board of direc-

tors may decide : *provided*, that said corporation shall not begin the transaction of business until capital stock to the amount of fifty thousand dollars shall be subscribed for and paid in, in cash, to the satisfaction of the commissioner of corporations of this Commonwealth, and no issue of stock shall be made to an amount greater than the stock paid in. Proviso.

SECT. 3. The said corporation may purchase, hold and improve real estate ; may contract for and build dwelling-houses and other buildings ; and sell, lease and convey the same for cash or on credit ; may sell houses for homes for working people and others of moderate means, to be paid for in monthly or other instalments, and secure the payment of such instalments in any way agreed upon with the purchaser ; may give and receive mortgages and notes secured thereby, and may sell and dispose thereof. May hold and improve real estate.  
May sell houses to be paid for in instalments.

SECT. 4. The shareholders of said corporation shall be held individually liable in the same manner and to the same extent and not otherwise as stockholders of manufacturing corporations are or may be held liable by the laws of this Commonwealth. The provisions contained in sections sixty-two to seventy-one, inclusive, of chapter one hundred and six of the Public Statutes, shall apply to and regulate the enforcement of this liability. Liability of shareholders.

SECT. 5. The said company shall annually make certificate and returns to the office of the secretary of the Commonwealth in the manner provided in section fifty-four of said chapter one hundred and six of the Public Statutes, the form of which return shall be subject to the approval of the commissioner of corporations, as therein provided. The said commissioner of corporations shall have access to the vaults, books and papers of said corporation, and shall have the right to examine and inquire into its affairs, and to take proceedings in regard to them at such times as he shall deem necessary. To make certificate and returns, annually, to the secretary of the Commonwealth.

SECT. 6. The shares of the capital stock of said corporation shall be assignable and transferable according to such rules and regulations as the stockholders shall for that purpose ordain and establish, and not otherwise. Shares to be transferable.

SECT. 7. This act shall take effect upon its passage.

*Approved March 29, 1889.*

## ACTS OF 1890.

### CHAPTER 37.

AN ACT RELATING TO THE STATE DIRECTORS IN THE COLLATERAL LOAN COMPANY AND THE WORKINGMEN'S LOAN ASSOCIATION.

*Be it enacted, etc., as follows :*

State directors  
to certify to cor-  
rectness of  
annual reports.

The director of the Collateral Loan Company, and the director of the Workingmen's Loan Association, appointed by the governor of this Commonwealth, shall certify to the correctness of the annual report made to the board of commissioners of savings banks by the company or association of which he is a director, and is authorized to make such other report to said board as he may deem proper.

*Approved February 18, 1890.*

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### CHAPTER 63.

AN ACT RELATING TO THE TAXATION OF CO-OPERATIVE BANKS.

*Be it enacted, etc., as follows :*

Exempted from  
taxation.

SECTION 1. The capital stock, corporate franchises and personal estate of co-operative banks shall be exempted from taxation ; but this act shall not be construed to exempt from taxation any real estate of such corporations.

Repeal of P. S.  
18, § 24.

SECT. 2. Section twenty-four of chapter thirteen of the Public Statutes is hereby repealed.

*Approved February 27, 1890.*

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### CHAPTER 183.

AN ACT TO PROHIBIT THE EMPLOYMENT OF WOMEN AND MINORS IN MANUFACTURING ESTABLISHMENTS BETWEEN THE HOURS OF TEN O'CLOCK AT NIGHT AND SIX O'CLOCK IN THE MORNING.

*Be it enacted, etc., as follows :*

Hours of labor  
for women and  
minors.

SECTION 1. No corporation or manufacturing establishment in this Commonwealth shall employ any woman or minor in any capacity for the purpose of manufacturing, between the hours of ten o'clock at night and six o'clock in the morning, under

the penalty of not less than twenty nor more than fifty dollars for each and every offence.

SECT. 2. This act shall take effect on the first day of July in the year eighteen hundred and ninety-one.

To take effect  
July 1, 1891.

*Approved April 11, 1890.*

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## CHAPTER 299.

AN ACT IN RELATION TO THE AGE AND SCHOOLING CERTIFICATES OF CHILDREN EMPLOYED IN FACTORIES, WORKSHOPS AND MERCANTILE ESTABLISHMENTS.

*Be it enacted, etc., as follows:*

SECTION 1. The following words shall appear on all age and schooling certificates enumerated in section four of chapter three hundred and forty-eight of the acts of the year eighteen hundred and eighty-eight after the name of the town or city and date:— This certificate belongs to the person in whose behalf it has been drawn, and it shall be surrendered to (him or her) whenever (he or she) leaves the service of the corporation or employer holding the same; and any such corporation or employer refusing to so deliver the same shall be punished by a fine of ten dollars.

Age and schooling certificates of children in factories, etc. 1888, 348, § 4.

SECT. 2. Any corporation or employer holding any age or schooling certificate enumerated in section four of chapter three hundred and forty-eight of the acts of the year eighteen hundred and eighty-eight and refusing to deliver the same to the person in whose behalf it has been drawn, when such person shall leave the employ of said corporation or employer, shall be punished by a fine of ten dollars.

Penalty on employer.

*Approved May 19, 1890.*

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## CHAPTER 310.

AN ACT IN RELATION TO THE BUSINESS OF CO-OPERATIVE BANKING.

*Be it enacted, etc., as follows:*

SECTION 1. Except as hereinafter provided, no person, association or corporation shall carry on the business of accumulating the savings of its members and loaning to them such accumulations in the manner of a co-operative bank within this Common-

Co-operative banks to be incorporated.



wealth, unless incorporated under the laws thereof for such purpose.

Foreign corporations to make a deposit with the treasurer of the Commonwealth.

SECT. 2. The board of commissioners of savings banks may authorize any such association or corporation duly established under the laws of another state to carry on such business in the Commonwealth, but said association or corporation shall not transact such business in this Commonwealth unless it shall first deposit with the treasurer of the Commonwealth the sum of twenty-five thousand dollars and thereafter a sum equal to fifteen per cent of the deposits made in such association or corporation by citizens of the Commonwealth, the amount of percentage of deposits so required to be determined from time to time by said board of commissioners of savings banks; or in lieu thereof the whole or any part of said sum may consist of any of the securities named in the first, second and third clauses of section twenty of chapter one hundred and sixteen of the Public Statutes and acts amendatory thereof, at their par value, and the said deposit shall be held in trust by said treasurer for the protection and indemnity of the residents of the Commonwealth with whom such associations or corporations respectively have done or may transact business. Said moneys or property shall be paid out or disposed of only on the order of some court of competent jurisdiction made on due notice to the attorney-general of the Commonwealth, and upon such notice to the creditors and shareholders of such association or corporation as the court shall prescribe. For the purpose of ascertaining the business and financial condition of any such association or corporation doing or desiring to do such business, said board may make examinations of such associations or corporations at such times and at such places as said board may desire, the expense of such examinations being paid by the association or corporation examined, and may also require returns to be made to them in such form and at such times as they may elect. Whenever, upon examination or otherwise, it is the opinion of said board that any such association or corporation is transacting business in such manner as to be hazardous to the public, or its condition is such as to render further proceedings by it hazardous to the public, said board shall revoke or suspend the authority given to said association or corporation, but this section shall not prevent such a bank or institution, incorporated under the laws of another state, from loaning money upon mortgages of real estate located within the Commonwealth.

Disposition of moneys deposited.

Examinations by commissioners.

Authority to do business may be revoked.

To conform with require-

SECT. 3. Every such person, association or corporation transacting business in the Commonwealth at the time of the

passage of this act shall, within sixty days after such passage, conform to the requirements of this act. ments within sixty days.

SECT. 4. Whoever violates any provision of the preceding sections shall be punished by a fine not exceeding one thousand dollars; and any provision thereof may on petition be enforced by injunction issued by a justice of the supreme judicial court or of the superior court. Penalties.

SECT. 5. This act shall take effect upon its passage.

*Approved May 21, 1890.*

## CHAPTER 375.

AN ACT CONSTITUTING NINE HOURS A DAY'S WORK FOR ALL LABORERS, WORKMEN AND MECHANICS EMPLOYED BY OR ON BEHALF OF THE COMMONWEALTH OR ANY CITY OR TOWN THEREIN.

*Be it enacted, etc., as follows:*

SECTION 1. Nine hours shall constitute a day's work for all laborers, workmen and mechanics now employed or who may be employed by or on behalf of the Commonwealth of Massachusetts or any city or town therein; and all acts and parts of acts inconsistent with this act are hereby repealed. Nine hours to be a day's work for workmen, etc., employed by the state, city, or a town.

SECT. 2. This act shall take effect on the first day of January in the year eighteen hundred and ninety-one. To take effect Jan. 1, 1891.

*Approved June 3, 1890.*

## SUBJECTS OF LABOR LEGISLATION.

The subjects of labor legislation are now presented alphabetically, with references to the statutes relating to them. This arrangement forms an index to the statutes previously presented. The abbreviation *St.* indicates "statute," *c* stands for "chapter," while the sign [§] is used to denote the "section." The "page" references are to pages, *ante*, in this Part.

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## CONCLUSION.

At the beginning of the present century trade was subjected to stringent legal regulations. Subsequent legislation has favored the removal of restrictions upon the interchange of commodities. During the same period, however, there has been a marked tendency toward governmental regulation of exchange of services. In the first case the principle of *laissez faire* has ruled; in the other the principle of State regulation of the employment of labor has prevailed. These two tendencies in modern legislation seem opposed to one another. They have really been mutually dependent. The movement which in one direction has aimed at unrestricted competition has in another direction necessitated governmental interference with individual action.

The development of the factory system following the introduction of machinery immediately changed the conditions surrounding production. It made possible the employment of classes previously unproductive. Skill was no longer essential to such employment. The income of the family might be increased by the aid of child workers, and the employment of women on an extensive scale became one of the features of industrial life. The system of isolated household industry gave place to the modern town in which masses of factory workers are congregated. These changed industrial conditions were practically revolutionary. They have resulted, on the whole, in immense social advantages, by no means confined to any particular class in society; but, at the same time, they have introduced grave social problems. It was very soon felt that the preservation of society demanded the establishment of rules under which the new relations between the employer and the employed might continue. These rules expressed in legal phraseology, with such changes as experience has shown to be necessary, constitute the labor laws now in force. This legislation has followed the growth and development of the factory system. Its beginning is found in the act passed in England under the auspices of Sir Robert Peel (42 George III. c. 73) restricting the labor of apprenticed children. Subsequently (1819-1831) other steps were taken. But this early legislation

was inoperative because no means had been provided for enforcing it. In 1833, Lord Ashley (3 and 4 William IV. c. 103) introduced the principle of stringent government inspection. This supplied the missing factor, and since that date legislation along this line has been broadened and extended.

At every step the assertion of the principle underlying it has been strenuously resisted, the argument taking the general ground of opposition to State paternalism, or to interference on the part of the State with the so-called freedom of contract. Yet it would be difficult to point out, as the result of such legislation, any of the evils which, before its enactment, were predicted by its opponents. In point of fact such legislation is identical in character with statutes which aim to establish and maintain favorable moral and sanitary conditions in society. It is perfectly true that men cannot be legislated into health or happiness, but it is also true that the social conditions surrounding them have much to do with their mental, moral, and physical development. If it is proper to guard against the maintenance of nuisances which may endanger the health of a community, it would seem equally proper to guard against such industrial conditions as tend either to illiteracy, physical degeneracy, crime, or pauperism; and labor legislation as a rule has had no other object. Indeed, this seems at last to be generally recognized. Opposition to labor legislation is now seldom based upon the assumption that the State should not deal with such matters, but it is more frequently urged that the proposed action is inexpedient, and of course such a contention may have weight, and should be duly considered. The modern industrial world is so closely bound together that the common welfare depends in no slight degree upon the similarity of the conditions under which production is carried on in different communities; and while it may be temporarily inexpedient to take such action in one State as may place it at a disadvantage in competition with others, it is well that the principle involved in such legislation is now accepted in all progressive countries.

In Massachusetts no specific labor legislation is found prior to 1831. In that year a special commission appointed by Governor Lincoln reported upon the subject of participation

of creditors in bankruptcy, and proposed to abolish imprisonment for debt where the amount involved was less than \$50. In 1834, an act abolishing imprisonment for debt was approved. In 1836, the first legislation specifically regulating the instruction of youths employed in manufacturing establishments appears, and from that date until 1863 labor legislation was practically confined to the subject of education of children employed in factories, to the subjects of imprisonment for debt and liens, and to various special acts incorporating mechanics' institutes and associations of similar character designed to promote the moral and intellectual improvement of mechanics, and to advance the state of the mechanical arts.

After 1832 the subject of regulating the hours of labor by legislation was frequently agitated and was the subject of reports by various commissions and legislative committees; but no definite action was taken until 1874, when the so-called Ten-Hour Law was passed, establishing the hours of labor for women and for children under eighteen years of age at sixty per week.

The principal labor legislation passed in this Commonwealth is the work of years subsequent to 1874. Such legislation, together with that passed in prior years, embraces the following subjects: Acts fixing the hours of labor for women and certain minors in manufacturing establishments at sixty per week; relating to contracts of labor; requiring belting, dangerous machinery, and hatchways in factories to be guarded; prescribing fire-escapes in factories and tenement houses; prohibiting unsafe elevators, and authorizing the appointment of inspectors of factories; providing for weekly payments in cities and by corporations; requiring seats for the use of females employed in manufacturing, mechanical, and mercantile establishments; prohibiting the contract employment of prisoners; exempting from attachment tools of mechanics to the amount of \$300; regulating the employment of children; authorizing the formation of co-operative associations and exempting from attachment shares therein to the amount of \$20; exempting the wages of wife and minor children from attachment; establishing a Bureau of Statistics of Labor; providing for the ventilation of factories; authorizing the estab-



lishment of industrial schools and evening schools; providing cheap transportation by railroads for workingmen; authorizing instruction in schools in the use of hand-tools; providing for the establishment of co-operative banks and regulating such institutions; incorporating labor reform, co-operative building and industrial associations; preventing persons or corporations from making special contracts with employes by which the latter exempt their employers from liability in case of accident to themselves in their work, and otherwise regulating employers' liability; requiring contractors on public buildings or works to give bonds or security for themselves and subcontractors that materials and labor shall be paid for; providing that in cases of insolvency the wages of clerks and servants to the amount of \$100 shall be paid in full; fixing the responsibility of railroad corporations for negligently causing the death of employes and providing for protection of railway employes against accident and death; prohibiting the locking of factory doors during working hours; regulating the use of explosive compounds in factories; requiring compulsory vaccination of employes; providing for a board of arbitration in labor disputes; and prohibiting the employment of women and minors in manufacturing establishments between the hours of ten o'clock at night and six o'clock in the morning.

#### NOTE.

The following amendment to section 3 of chapter 270 of the acts of 1887, *The Employer's Liability Act*, was made by chapter 155 of the acts of 1888, and having been omitted in the chronological presentation is here inserted. After the word "death" in the twelfth line of said section as printed on page 64, the following words are inserted:

"The notice required by this section shall be in writing, signed by the person injured or by some one in his behalf; but if from physical or mental incapacity it is impossible for the person injured to give the notice within the time provided in said section, he may give the same within ten days after such incapacity is removed, and in case of his death without having given the notice and without having been for ten days at any time after his injury of sufficient capacity to give the notice, his executor or administrator may give such notice within thirty days after his appointment."

Chapter 90 of the acts of 1890, also omitted in the chronological presentation, prohibits the employment of any person under fifteen years of age in the care, custody, management or operation of an elevator, and also prohibits, under penalty of fine, such employment of any person under eighteen years of age when the elevator runs at the speed of over 200 feet a minute.

Chapter 438 of the acts of 1890, while not strictly labor legislation, permits an appeal from the orders of the inspection department of the District Police in certain cases occurring under chapters 149, 316, or 426 of the acts of 1888.

It should also be pointed out that chapter 384 of the acts of 1890, while not strictly labor legislation, affects the employment of children inasmuch as it provides that persons having children between the ages of eight and fourteen years under their control shall cause such children to attend school at least thirty weeks of the school year. It will be noticed that the statute directly regulating the employment of children (chapter 348 of the acts of 1888) requires twenty weeks' schooling; but by the educational statute just cited the "one having control" of the child will be liable to penalty if the child is not kept in school for a period of thirty weeks.

*As the grand result of labor legislation, the legal hours of employment in factories for women and for minors under eighteen years of age are fixed at sixty per week with the provision that neither women nor minors can be employed between the hours of ten at night and six in the morning; no child under thirteen years of age can be legally employed at any time in any factory, workshop or mercantile establishment, nor in any indoor work for hire during school hours, nor in any manner during such hours unless he has had thirty weeks' schooling during the year preceding as required by law; no child under fourteen can be employed between the hours of seven at night and six in the morning, nor in any factory, workshop or mercantile establishment, except during school vacations, unless able to read and write in the English language or a regular attendant at a public evening school; nor employed in any indoor work for hire during school hours unless as aforesaid, nor legally employed in any manner for hire during school hours unless he has had thirty weeks' schooling during the year preceding as required by*

*law. No minor over fourteen can be regularly employed if unable to read or write in the English language, except in certain contingencies; no minor under sixteen can be legally employed in any factory, workshop, or mercantile establishment unless his employer keeps on file an age and schooling certificate respecting such minor as required by law; no minor under eighteen can be legally employed more than sixty hours per week in any mercantile establishment; imprisonment for debt is abolished; a lien law is provided; necessary tools of the mechanic are exempt from attachment; the trustee process is curtailed; co-operative associations and banks or building societies are authorized; regulations for the protection of life and health in factories are provided, and the inspection of factories required; and, finally, while perhaps not strictly in the line of labor legislation, educational facilities have been broadened and made perfectly free as regards instruction and text books. Without specific legislation, ten hours has come to be the maximum day's work in most industries, while the tendency is toward a shorter working day.*

[This codification of labor laws closes with the year 1890. The adjournment of the legislature prior to the publication of the completed report enables us to incorporate in the Introduction to this volume the labor legislation of the session of 1891, to which the reader is referred.]

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PART II.

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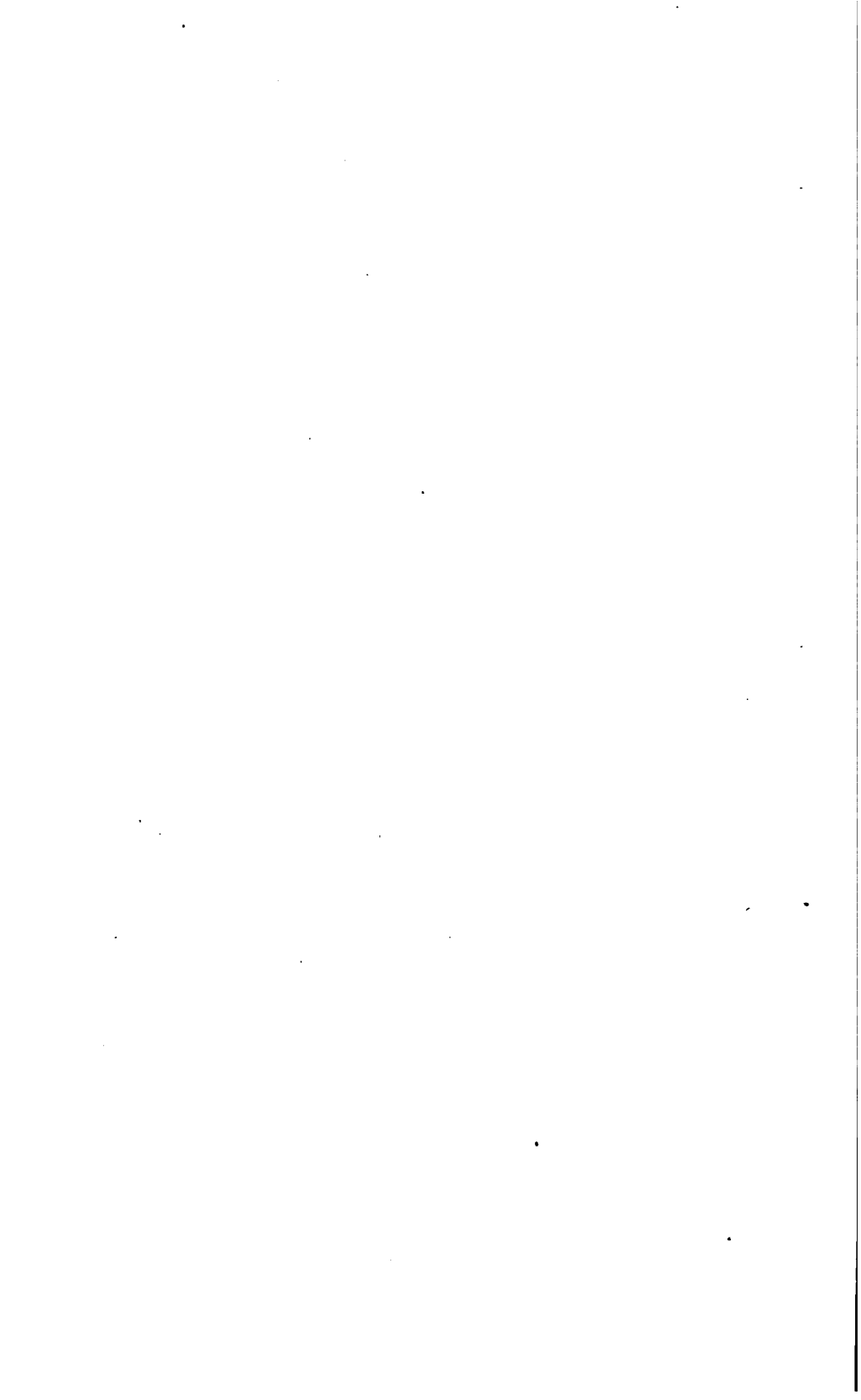
POPULATION OF MASSACHUSETTS.

1890.

FROM THE ELEVENTH UNITED STATES CENSUS.

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## PART II.

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# POPULATION OF MASSACHUSETTS.

1890.

## FROM THE ELEVENTH UNITED STATES CENSUS.

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The census system of Massachusetts has been administered by this Bureau since 1875. In 1880, by the consent of the Legislature, the Bureau was brought into connection with the United States Census Office by the appointment of the Chief as Supervisor and the precedent then established was followed in 1890. The arrangement is of mutual benefit to the Commonwealth and to the Federal government, insuring, it is believed, the utmost possible accuracy in the enumeration.

Upon the Supervisor devolved the division of the State into enumeration districts, the selection of enumerators, and the general supervision of their work, subject, in all these matters, to the approval of the Department at Washington. In general, the limits of enumeration districts, the qualifications of enumerators, and their compensation, were fixed by statute. The Supervisor had no connection with the preparation of the schedules, the character of the inquiries, or the tabulation of results.

In the Decennial Census of Massachusetts, taken in May, 1885, the number of enumeration districts was 570. Owing to the special requirements of the United States Census Law, the number was much greater in 1890, the total being 1,100.

Besides these districts there were 141 institutions of various kinds, within each of which the enumeration was performed by a special enumerator. The whole number of enumerators of population statistics was 1,241.

When it is considered that the work of enumeration is difficult, the pay small, and the engagement limited, it will be understood that it is not always possible to secure as enumerators persons possessing ideal qualifications. This year, in Massachusetts, the difficulty was increased by the remarkably small number of applications. No effort was spared in order to get the best persons available. Each applicant was required to furnish, upon blanks provided by the Census Office, a statement in his own handwriting, giving, among other facts, his place of birth, legal residence, and information relating to his education and professional or business experience. In addition to this, no one was selected for appointment by the Supervisor who did not file such recommendations as would have entitled him to consideration had his application for employment been made to a first class mercantile house; and out of the 1,100 district enumerators, there were but few who proved unsatisfactory or without capacity to properly perform the work. A provision of the Census Law requires that enumerators shall be appointed without reference to their political party affiliations. This plain provision was strictly observed, and, as the political affiliations of the appointees were, in most cases, unknown to the Supervisor, and in no case controlled appointments, it is probable that neither political party was greatly in preponderance in the selections made.

The returns for every district were closely scanned, and wherever it appeared possible that errors or omissions had been made, either through inadvertence or the incapacity of the enumerator, the matter was investigated, and, if necessary, correction was made. No census has ever been taken which has escaped criticism. Nothing is more common than for a city or town to form an exaggerated idea of its progress and to feel disappointed if the census figures do not quite reach the anticipated mark. Possibly some instances may exist in Massachusetts where this feeling now obtains. With the results as a whole, however, there is no ground for dissatisfaction in this Commonwealth. Our growth during the five

years from 1885 to 1890 exceeds the rate of growth for the previous period of five years, and the total population, as disclosed by the Eleventh Census, is in excess of the estimated population based upon the results of the Decennial Census of 1885.

The Thirteenth Annual Report of this Bureau was accompanied by a supplement presenting the results of the Tenth United States Census, taken in 1880. By the courtesy of the Census Office in Washington, the Bureau is enabled to present, in this Part of its present report, the complete and revised figures showing the population by cities and towns, as obtained in June, 1890. The growth of the Commonwealth is largely due to its industrial activities, and the tendencies to that growth, so far as determined by a critical comparison between different census periods, are worthy of the closest study. In the table which follows such comparisons have been made. In the analysis which accompanies the table the leading facts are brought out, and the relative importance of our industrial towns made plain.



	COUNTIES, CITIES, AND TOWNS.	POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
1	<b>BARNSTABLE.</b>	31,897	29,845	29,172
2	Barnstable, . . . . .	4,242	4,050	4,023
3	Bourne,* . . . . .	-	1,363	1,442
4	Brewster, . . . . .	1,144	934	1,003
5	Chatham, . . . . .	2,250	2,028	1,954
6	Dennis, . . . . .	3,288	2,923	2,899
7	Eastham,† . . . . .	592	688	602
8	Falmouth,‡ . . . . .	2,422	2,620	2,567
9	Harwich, . . . . .	3,265	2,783	2,734
10	Mashpee,§ . . . . .	346	311	298
11	Orleans, . . . . .	1,294	1,176	1,219
12	Provincetown, . . . . .	4,346	4,480	4,642
13	Sandwich,* . . . . .	3,543	2,124	1,819
14	Truro, . . . . .	1,017	972	919
15	Wellfleet,† . . . . .	1,875	1,687	1,291
16	Yarmouth, . . . . .	2,173	1,866	1,760
17	<b>BERKSHIRE.</b>	69,032	73,828	81,108
18	Adams, . . . . .	5,591	8,283	9,213
19	Alford, . . . . .	348	341	297
20	Becket, . . . . .	1,123	938	946
21	Cheshire, . . . . .	1,537	1,448	1,308
22	Clarkeburg, . . . . .	724	708	884
23	Dalton, . . . . .	2,052	2,113	2,885
24	Egremont, . . . . .	875	826	845
25	Florida, . . . . .	459	487	436
26	Great Barrington, . . . . .	4,653	4,471	4,612
27	Hancock, . . . . .	642	613	506
28	Hinsdale, . . . . .	1,595	1,656	1,739
29	Lanesborough, . . . . .	1,286	1,212	1,018
30	Lee, . . . . .	3,939	4,274	3,785
31	Lenox, . . . . .	2,043	2,154	2,869
32	Monterey, . . . . .	635	571	495
33	Mount Washington, . . . . .	205	160	148
34	New Ashford, . . . . .	203	163	125
35	New Marlborough, . . . . .	1,876	1,661	1,305
36	North Adams, . . . . .	10,191	12,540	16,074
37	Otis, . . . . .	785	703	583
38	Peru, . . . . .	403	368	305
39	<b>PITTSFIELD,§</b>	13,364	14,466	17,281
40	Ward 1, . . . . .	-	-	2,502
41	Ward 2, . . . . .	-	-	2,477
42	Ward 3, . . . . .	-	-	2,549
43	Ward 4, . . . . .	-	-	2,478
44	Ward 5, . . . . .	-	-	2,151
45	Ward 6, . . . . .	-	-	2,800
46	Ward 7, . . . . .	-	-	2,324
47	Richmond, . . . . .	1,124	854	796
48	Sandisfield, . . . . .	1,107	1,019	807
49	Savoy, . . . . .	715	691	569
50	Sheffield, . . . . .	2,204	2,033	1,964
51	Stockbridge, . . . . .	2,357	2,114	2,132
52	Tyringham, . . . . .	542	457	412
53	Washington, . . . . .	493	470	434
54	West Stockbridge, . . . . .	1,923	1,648	1,492
55	Williamstown, . . . . .	3,394	3,729	4,221
56	Windsor, . . . . .	644	657	612
57	<b>BRISTOL.</b>	139,040	158,498	186,465
58	Acushnet, . . . . .	1,105	1,071	1,027
59	Attleborough,   . . . . .	11,111	13,175	7,577
60	Berkley, . . . . .	927	941	804
61	Dartmouth,** . . . . .	3,430	3,448	3,122
62	Dighton, . . . . .	1,791	1,782	1,889
63	Easton, . . . . .	3,902	3,948	4,493
64	Fairhaven, . . . . .	2,875	2,880	2,919

\* The town of Bourne was set off from the town of Sandwich, April 2, 1884.

† Boundary line established between Eastham and Wellfleet, May 6, 1887.

‡ Boundary line established between Falmouth and Mashpee, June 18, 1885.

§ Became a city, January 1, 1891.

|| The town of North Attleborough was set off from the town of Attleborough, June 14, 1887.

\*\* Boundary line between Dartmouth and New Bedford changed and a part of Dartmouth annexed to New Bedford, May 3, 1888.

INCREASE (+), OR DECREASE (-), IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN—			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-2,052	-673	-2,725	-6.43	-2.25	-8.54	1
-192	-27	-219	-4.53	-0.67	-5.16	2
+1,363	+79	+1,442	-	+5.80	-	3
-210	+69	-141	-18.36	+7.39	-12.33	4
-222	-74	-296	-9.87	-3.65	-13.16	5
-865	-24	-389	-11.10	-0.82	-11.83	6
-54	-36	-90	-7.80	-5.64	-13.01	7
+98	+47	+145	+4.03	+1.87	+5.99	8
-482	-49	-531	-14.76	-1.76	-16.26	9
-85	-13	-48	-10.12	-1.18	-13.87	10
-118	+43	-75	-9.12	+3.66	-5.80	11
+134	+162	+296	+3.08	+3.62	+6.81	12
-1,419	-305	-1,724	-40.05	-14.36	-48.66	13
-45	-63	-98	-4.42	-5.45	-9.64	14
-188	-396	-584	-10.03	-23.47	-31.15	15
-317	-96	-413	-14.59	-5.17	-19.01	16
+4,796	+7,280	+12,076	+6.96	+9.86	+17.49	17
+2,692	+930	+3,622	+48.15	+11.23	+64.78	18
-7	-44	-51	-2.01	-12.90	-14.66	19
-186	+8	-177	-16.47	+0.85	-16.76	20
-89	-140	-229	-5.79	-9.67	-14.90	21
-16	+176	+160	-2.21	+24.86	+22.10	22
+61	+772	+833	+2.97	+36.54	+40.69	23
-49	+19	-30	-5.60	+2.30	-3.43	24
+28	-51	-23	+6.10	-10.47	-5.01	25
-182	+141	-41	-3.91	+3.15	-0.88	26
-29	-107	-136	-4.52	-17.46	-21.18	27
+61	+83	+144	+3.82	+5.01	+9.03	28
-74	-104	-268	-5.75	-16.01	-20.84	29
+835	-489	-154	+8.50	-11.44	-3.91	30
+111	+735	+846	+5.43	+34.12	+41.41	31
-64	-76	-140	-10.08	-13.31	-22.05	32
-45	-12	-57	-21.95	-7.50	-27.80	33
-40	-38	-78	-19.70	-23.31	-38.42	34
-215	-356	-571	-11.46	-21.43	-30.44	35
+2,349	+3,534	+5,883	+23.05	+28.18	+57.73	36
-82	-120	-202	-10.45	-17.07	-25.73	37
-35	-63	-98	-8.68	-17.12	-24.32	38
+1,102	+2,815	+3,917	+8.25	+19.46	+29.31	39
-	-	-	-	-	-	40
-	-	-	-	-	-	41
-	-	-	-	-	-	42
-	-	-	-	-	-	43
-	-	-	-	-	-	44
-	-	-	-	-	-	45
-	-	-	-	-	-	46
-270	-58	-328	-24.02	-0.79	-29.18	47
-88	-212	-300	-7.95	-20.80	-27.10	48
-24	-122	-146	-3.36	-17.66	-20.42	49
-171	-79	-250	-7.76	-3.89	-11.84	50
-243	+18	-225	-10.31	+0.85	-9.55	51
-85	-45	-130	-15.68	-9.85	-23.09	52
-23	-30	-59	-4.67	-7.66	-11.97	53
-275	-156	-431	-14.30	-9.47	-22.41	54
+336	+492	+827	+9.87	+13.10	+24.37	55
+13	-45	-32	+2.02	-6.85	-4.97	56
+19,458	+27,967	+47,425	+13.99	+17.65	+34.11	57
-34	-44	-78	-3.08	-4.11	-7.06	58
+2,064	-5,598	-3,534	+18.58	-42.40	-31.81	59
+14	-47	-33	+1.51	-4.99	-3.56	60
+18	-326	-308	+0.52	-9.45	-8.93	61
-9	+107	+98	-0.50	+6.00	+5.47	62
+46	+545	+591	+1.18	+13.80	+15.15	63
+5	+39	+44	+0.17	+1.35	+1.63	64

COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
BRISTOL — Con.				
1	FALL RIVER, . . . . .	48,961	56,870	74,398
2	Ward 1, . . . . .	7,980	7,547	12,257
3	Ward 2, . . . . .	7,925	6,004	7,327
4	Ward 3, . . . . .	7,299	6,557	7,100
5	Ward 4, . . . . .	12,619	6,809	8,394
6	Ward 5, . . . . .	5,770	6,255	7,518
7	Ward 6, . . . . .	7,368	8,720	12,424
8	Ward 7, . . . . .	—	5,059	5,598
9	Ward 8, . . . . .	—	2,569	3,077
10	Ward 9, . . . . .	—	7,360	10,703
11	Freetown, . . . . .	1,329	1,457	1,417
12	Mansfield, . . . . .	2,765	2,939	3,432
13	NEW BEDFORD,*	26,845	33,393	40,733
14	Ward 1, . . . . .	5,673	8,878	10,942
15	Ward 2, . . . . .	4,216	4,190	4,577
16	Ward 3, . . . . .	4,077	4,340	4,613
17	Ward 4, . . . . .	3,520	3,693	3,522
18	Ward 5, . . . . .	4,554	4,890	5,283
19	Ward 6, . . . . .	4,805	7,402	11,796
20	North Attleborough,†	—	—	6,727
21	Norton, . . . . .	1,732	1,718	1,785
22	Raynham, . . . . .	1,681	1,535	1,340
23	Rehoboth, . . . . .	1,891	1,788	1,786
24	Seekonk, . . . . .	1,227	1,295	1,317
25	Somerset, . . . . .	2,006	2,475	2,106
26	Swansea, . . . . .	1,355	1,403	1,456
27	TAUNTON, . . . . .	21,213	23,674	25,448
28	Ward 1, . . . . .	3,847	4,156	4,609
29	Ward 2, . . . . .	1,551	1,755	1,597
30	Ward 3, . . . . .	3,165	3,409	3,703
31	Ward 4, . . . . .	1,840	2,097	2,020
32	Ward 5, . . . . .	1,603	1,344	1,099
33	Ward 6, . . . . .	2,278	2,393	2,673
34	Ward 7, . . . . .	2,157	2,161	2,433
35	Ward 8, . . . . .	4,772	6,359	7,314
36	Westport, . . . . .	2,894	2,706	2,599
37	DUKES, . . . . .	4,300	4,135	4,369
38	Chilmark, . . . . .	494	412	353
39	Cottage City, . . . . .	672	709	1,080
40	Edgartown, . . . . .	1,303	1,165	1,156
41	Gay Head, . . . . .	161	186	139
42	Gosnold, . . . . .	152	122	135
43	Tisbury, . . . . .	1,518	1,541	1,506
44	ESSEX, . . . . .	244,535	263,727	299,995
45	Amesbury,‡	3,355	4,403	9,798
46	Andover, . . . . .	5,169	5,711	6,142
47	Beverly, . . . . .	8,456	9,186	10,821
48	Boxford, . . . . .	824	840	866
49	Bradford, . . . . .	2,643	3,106	3,720
50	Danvers, . . . . .	6,598	7,061	7,454
51	Essex, . . . . .	1,670	1,722	1,718
52	Georgetown, . . . . .	2,231	2,299	2,117
53	GLOUCESTER, . . . . .	19,329	21,703	24,661
54	Ward 1, . . . . .	2,551	2,801	3,320
55	Ward 2, . . . . .	3,264	3,747	4,281
56	Ward 3, . . . . .	3,013	3,677	4,822
57	Ward 4, . . . . .	2,787	3,167	2,914
58	Ward 5, . . . . .	2,955	3,458	3,757
59	Ward 6, . . . . .	1,850	1,994	2,374
60	Ward 7, . . . . .	1,742	1,690	2,034
61	Ward 8, . . . . .	1,167	1,169	1,149
62	Groveland, . . . . .	2,227	2,272	2,191
63	Hamilton, . . . . .	935	851	961
64	HAVERHILL, . . . . .	18,472	21,795	27,412
65	Ward 1, . . . . .	2,641	2,833	3,239

\* Boundary line between New Bedford and Dartmouth changed and a part of Dartmouth annexed to New Bedford, May 3, 1883.

† The town of North Attleborough was set off from the town of Attleborough, June 14, 1887.

‡ Part of Salisbury annexed to Amesbury, June 16, 1886.

INCREASE (+), OR DECREASE (-), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN —			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
+7,909	+17,528	+25,437	+16.15	+30.82	+51.95	1
-	-	-	-	-	-	2
-	-	-	-	-	-	3
-	-	-	-	-	-	4
-	-	-	-	-	-	5
-	-	-	-	-	-	6
-	-	-	-	-	-	7
-	-	-	-	-	-	8
-	-	-	-	-	-	9
-	-	-	-	-	-	10
+128	-40	+88	+9.63	-2.75	+6.62	11
+174	+493	+667	+6.29	+16.77	+24.12	12
+6,548	+7,340	+13,888	+24.39	+21.98	+51.73	13
-	-	-	-	-	-	14
-	-	-	-	-	-	15
-	-	-	-	-	-	16
-	-	-	-	-	-	17
-	-	-	-	-	-	18
-	-	-	-	-	-	19
-	+6,727	+6,727	-	-	-	20
-14	+67	+53	-0.81	+3.90	+3.06	21
-148	-195	-341	-8.69	-12.70	-20.29	22
-103	-2	-105	-5.45	-0.11	-5.55	23
+68	+22	+90	+5.54	+1.70	+7.33	24
+480	-369	+100	+23.38	-14.01	+4.99	25
+48	+53	+101	+3.54	+3.78	+7.45	26
+2,461	+1,774	+4,235	+11.60	+7.49	+19.96	27
-	-	-	-	-	-	28
-	-	-	-	-	-	29
-	-	-	-	-	-	30
-	-	-	-	-	-	31
-	-	-	-	-	-	32
-	-	-	-	-	-	33
-	-	-	-	-	-	34
-	-	-	-	-	-	35
-188	-107	-295	-6.50	-3.95	-10.19	36
-165	+234	+69	-3.84	+5.66	+1.60	37
-82	-59	-141	-16.60	-14.32	-28.54	38
+37	+371	+408	+5.51	+52.33	+60.71	39
-138	-9	-147	-10.59	-0.77	-11.28	40
+25	-47	-22	+15.53	-25.27	-13.66	41
-30	+13	-17	-19.74	+10.66	-11.18	42
+23	-35	-12	+1.52	-2.27	-0.79	43
+19,192	+36,268	+55,460	+7.85	+13.75	+22.68	44
+1,048	+5,395	+6,443	+31.24	+122.53	+192.04	45
+542	+431	+973	+10.49	+7.55	+18.82	46
+730	+1,635	+2,365	+8.63	+17.80	+27.97	47
+16	+25	+41	+1.94	+2.98	+4.98	48
+463	+614	+1,077	+17.52	+19.77	+40.75	49
+463	+393	+856	+7.02	+5.57	+12.97	50
+52	-9	+43	-3.11	-0.52	+2.57	51
+68	-182	-114	+3.05	-7.92	-5.11	52
+2,374	+2,948	+5,322	+12.28	+13.58	+27.53	53
-	-	-	-	-	-	54
-	-	-	-	-	-	55
-	-	-	-	-	-	56
-	-	-	-	-	-	57
-	-	-	-	-	-	58
-	-	-	-	-	-	59
-	-	-	-	-	-	60
-	-	-	-	-	-	61
+45	-81	-36	+2.02	-3.57	-1.62	62
-84	+110	+26	-8.98	+12.93	+2.78	63
+3,323	+5,617	+8,940	+17.99	+25.77	+48.40	64
-	-	-	-	-	-	65

COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
ESSEX — Con.				
HAVERHILL — Con.				
1	Ward 2, . . . . .	2,255	2,261	2,547
2	Ward 3, . . . . .	3,400	3,523	4,101
3	Ward 4, . . . . .	2,534	2,813	3,593
4	Ward 5, . . . . .	4,124	6,162	9,143
5	Ward 6, . . . . .	3,518	4,103	4,789
6	Ipswich, . . . . .	3,899	4,207	4,439
7	LAWRENCE, . . . . .	39,151	38,882	44,654
8	Ward 1, . . . . .	6,818	6,432	6,952
9	Ward 2, . . . . .	6,086	5,869	6,338
10	Ward 3, . . . . .	8,184	7,118	8,368
11	Ward 4, . . . . .	7,214	7,571	9,147
12	Ward 5, . . . . .	6,579	7,001	7,888
13	Ward 6, . . . . .	4,270	4,871	5,961
14	LYNN, . . . . .	88,274	45,867	55,727
15	Ward 1, . . . . .	786	961	1,241
16	Ward 2, . . . . .	2,048	2,469	3,141
17	Ward 3, . . . . .	7,797	9,544	12,214
18	Ward 4, . . . . .	9,264	11,276	11,249
19	Ward 5, . . . . .	9,252	10,756	13,041
20	Ward 6, . . . . .	7,964	9,575	12,790
21	Ward 7, . . . . .	1,163	1,286	2,051
22	Lynnfield, . . . . .	686	766	787
23	Manchester, . . . . .	1,640	1,639	1,789
24	Marblehead, . . . . .	7,467	7,517	8,202
25	Merrimac, . . . . .	2,237	2,378	2,633
26	Methuen, . . . . .	4,392	4,507	4,814
27	Middleton, . . . . .	1,000	899	924
28	Nahant, . . . . .	808	637	880
29	Newbury, . . . . .	1,566	1,590	1,427
30	NEWBURYPORT, . . . . .	13,538	13,716	13,947
31	Ward 1, . . . . .	2,255	2,139	2,194
32	Ward 2, . . . . .	2,102	2,207	2,014
33	Ward 3, . . . . .	2,306	2,456	2,653
34	Ward 4, . . . . .	2,248	2,230	2,266
35	Ward 5, . . . . .	2,539	2,417	2,335
36	Ward 6, . . . . .	2,088	2,267	2,486
37	North Andover, . . . . .	3,217	3,423	3,742
38	Peabody, . . . . .	9,028	9,530	10,158
39	Rockport, . . . . .	3,912	3,888	4,087
40	Rowley, . . . . .	1,201	1,183	1,248
41	SALEM, . . . . .	27,563	28,090	30,801
42	Ward 1, . . . . .	4,444	4,547	4,661
43	Ward 2, . . . . .	4,527	4,708	5,196
44	Ward 3, . . . . .	3,516	3,661	3,988
45	Ward 4, . . . . .	4,734	4,676	5,067
46	Ward 5, . . . . .	6,761	6,697	7,794
47	Ward 6, . . . . .	3,581	3,801	4,095
48	Salisbury,* . . . . .	4,079	4,840	1,316
49	Saugus, . . . . .	2,625	2,855	3,673
50	Swampscott, . . . . .	2,500	2,471	3,198
51	Topshfield, . . . . .	1,165	1,141	1,022
52	Wenham, . . . . .	889	871	886
53	West Newbury, . . . . .	1,989	1,899	1,796
FRANKLIN.				
54		36,001	37,449	38,610
55	Ashfield, . . . . .	1,066	1,097	1,025
56	Bernardston,† . . . . .	934	930	770
57	Buckland, . . . . .	1,739	1,760	1,570
58	Charlemont, . . . . .	932	958	972
59	Colrain, . . . . .	1,777	1,605	1,671
60	Conway, . . . . .	1,760	1,573	1,451
61	Deerfield, . . . . .	3,543	3,042	2,810
62	Erving, . . . . .	872	873	972
63	Gill, . . . . .	733	860	960
64	Greenfield, . . . . .	3,903	4,809	5,252
65	Hawley, . . . . .	592	545	515
66	Heath, . . . . .	560	568	503
67	Leverett, . . . . .	742	779	702
68	Leyden,† . . . . .	507	447	407
69	Monroe, . . . . .	166	176	282

\* Part of Salisbury annexed to Amesbury, June 16, 1886.

† Part of Leyden annexed to Bernardston, May 7, 1886.

INCREASE (+), OR DECREASE (-), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN —			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-	-	-	-	-	-	1
-	-	-	-	-	-	2
-	-	-	-	-	-	3
-	-	-	-	-	-	4
+308	+232	+740	+13.73	+5.51	+20.01	5
-289	+5,792	+5,503	-0.74	+14.90	+14.06	6
-	-	-	-	-	-	7
-	-	-	-	-	-	8
-	-	-	-	-	-	9
-	-	-	-	-	-	10
-	-	-	-	-	-	11
-	-	-	-	-	-	12
+7,593	+9,800	+17,453	+19.84	+21.50	+45.60	13
-	-	-	-	-	-	14
-	-	-	-	-	-	15
-	-	-	-	-	-	16
-	-	-	-	-	-	17
-	-	-	-	-	-	18
-	-	-	-	-	-	19
-	-	-	-	-	-	20
+90	+21	+101	+11.66	+2.74	+14.72	21
-1	+150	+149	-0.06	+9.15	+9.09	22
+50	+685	+735	-0.67	+9.11	+9.84	23
+141	+255	+396	-6.30	+10.72	+17.70	24
+115	+307	+422	-2.62	+6.81	+9.61	25
-101	+25	-76	-10.10	+2.78	-7.60	26
-171	+243	+72	-21.16	+38.15	+8.91	27
+24	-163	-139	+1.53	-10.25	-8.87	28
+178	+231	+409	+1.31	+1.68	+3.02	29
-	-	-	-	-	-	30
-	-	-	-	-	-	31
-	-	-	-	-	-	32
-	-	-	-	-	-	33
-	-	-	-	-	-	34
-	-	-	-	-	-	35
+208	+317	+525	+6.47	+9.26	+16.32	36
+502	+628	+1,130	+5.56	+6.69	+12.52	37
-24	+199	+175	-0.61	+5.12	+4.47	38
-18	+65	+47	-1.50	+5.49	+3.91	39
+527	+2,711	+3,238	+1.91	+9.65	+11.75	40
-	-	-	-	-	-	41
-	-	-	-	-	-	42
-	-	-	-	-	-	43
-	-	-	-	-	-	44
-	-	-	-	-	-	45
-	-	-	-	-	-	46
+761	-3,524	-2,763	+18.66	-72.81	-67.74	47
+230	+518	+1,048	+8.76	+28.65	+39.92	48
-29	+727	+698	-1.16	+29.42	+27.92	49
-24	-119	-143	-2.06	-10.43	-12.27	50
-18	+15	-3	-2.02	+1.72	-0.34	51
-90	-103	-193	-4.52	-5.42	-9.70	52
+1,448	+1,161	+2,609	+4.02	+3.10	+7.25	53
+31	-72	-41	+2.91	-6.56	-3.85	54
-4	-160	-164	-0.43	-17.20	-17.56	55
+21	-190	-169	+1.21	-10.80	-9.72	56
+26	+14	+40	+2.79	+1.46	+4.29	57
-172	+66	-106	-9.68	+4.11	-5.97	58
-187	-122	-309	-10.63	-7.76	-17.56	59
-501	-132	-633	-14.14	-4.34	-17.87	60
+1	+99	+100	+0.11	+11.34	+11.47	61
+127	+100	+227	+17.33	+11.63	+30.97	62
+966	+393	+1,349	+24.75	+7.87	+34.56	63
-47	-30	-77	-7.94	-5.50	-13.01	64
+8	-65	-67	+1.43	-11.44	-10.18	65
+37	-77	-40	+4.99	-9.88	-5.39	66
-60	-40	-100	-11.83	-8.95	-19.72	67
+10	+106	+116	+6.02	+60.23	+69.88	68

	COUNTIES, CITIES, AND TOWNS.	POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
FRANKLIN — Con.				
1	Montague, . . . . .	4,875	5,629	6,296
2	New Salem, . . . . .	869	832	856
3	Northfield, . . . . .	1,603	1,705	1,869
4	Orange, . . . . .	3,169	3,650	4,568
5	Rowe, . . . . .	502	582	641
6	Shelburne, . . . . .	1,621	1,614	1,553
7	Shutesbury, . . . . .	629	485	453
8	Sunderland, . . . . .	755	700	663
9	Warwick, . . . . .	713	662	665
10	Wendell, . . . . .	465	509	505
11	Whately, . . . . .	1,074	999	779
12	HAMPDEN.	104,142	116,764	135,713
13	Agawam, . . . . .	2,216	2,357	2,352
14	Blandford, . . . . .	979	964	871
15	Brimfield, . . . . .	1,203	1,137	1,096
16	Chester, . . . . .	1,473	1,318	1,295
17	CHICOPPE,*	11,286	11,516	14,050
18	Granville, . . . . .	1,205	1,193	1,061
19	Hampden, . . . . .	958	868	831
20	Holland, . . . . .	302	229	201
21	HOLYOKE,	21,915	27,895	35,637
22	Ward 1, . . . . .	2,714	3,762	4,346
23	Ward 2, . . . . .	2,931	4,420	5,145
24	Ward 3, . . . . .	3,118	3,714	5,085
25	Ward 4, . . . . .	4,706	4,321	7,614
26	Ward 5, . . . . .	3,514	3,222	3,052
27	Ward 6, . . . . .	3,247	6,156	6,227
28	Ward 7, . . . . .	1,685	2,800	4,168
29	Longmeadow,†	1,401	1,677	2,183
30	Ludlow, . . . . .	1,526	1,649	1,939
31	Monson, . . . . .	3,758	3,958	3,850
32	Montgomery, . . . . .	803	278	266
33	Palmer, . . . . .	5,504	5,923	6,520
34	Russell, . . . . .	823	847	879
35	Southwick, . . . . .	1,104	982	914
36	SPRINGFIELD,†	33,340	37,575	44,179
37	Ward 1, . . . . .	8,131	9,084	12,075
38	Ward 2, . . . . .	3,999	4,149	4,265
39	Ward 3, . . . . .	4,481	4,905	5,055
40	Ward 4, . . . . .	4,050	4,343	4,868
41	Ward 5, . . . . .	5,651	6,865	9,901
42	Ward 6, . . . . .	2,466	2,988	3,646
43	Ward 7, . . . . .	1,679	1,985	2,391
44	Ward 8, . . . . .	2,923	2,756	2,478
45	Tolland, . . . . .	452	422	393
46	Wales, . . . . .	1,030	853	700
47	Westfield, . . . . .	7,587	8,961	9,805
48	West Springfield, . . . . .	4,149	4,448	5,077
49	Wilbraham, . . . . .	1,623	1,724	1,814
50	HAMPSHIRE.	47,232	43,472	51,859
51	Amherst, . . . . .	4,298	4,199	4,512
52	Belchertown, . . . . .	2,346	2,307	2,120
53	Chesterfield, . . . . .	769	698	608
54	Cummington, . . . . .	881	805	787
55	Easthampton, . . . . .	4,206	4,291	4,395
56	Enfield, . . . . .	1,043	1,010	952
57	Goshen, . . . . .	327	336	297
58	Granby, . . . . .	753	729	766
59	Greenwich, . . . . .	633	632	628
60	Hadley, . . . . .	1,938	1,747	1,669
61	Hatfield, . . . . .	1,495	1,367	1,246
62	Huntington, . . . . .	1,236	1,267	1,385
63	Middlefield, . . . . .	648	513	455
64	NORTHAMPTON,	12,172	12,896	14,990
65	Ward 1, . . . . .	-	1,763	2,059
66	Ward 2, . . . . .	-	1,078	2,085
67	Ward 3, . . . . .	-	1,953	2,429
68	Ward 4, . . . . .	-	2,156	2,350
69	Ward 5, . . . . .	-	1,882	2,227

\* Became a city, January 1, 1891. Population for 1890 not distributed by wards.

† Part of Longmeadow annexed to Springfield, June 2, 1890.

INCREASE (+), OR DECREASE (-), IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN—			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
+754	+667	+1,421	+15.47	+11.85	+29.15	1
-37	+24	-13	-4.26	+2.83	-1.50	2
+102	+164	+266	+6.36	+9.62	+16.59	3
+181	+918	+1,389	+15.18	+25.15	+44.15	4
+90	-41	+39	+15.94	-7.04	+7.77	5
-7	-61	-68	-0.43	-3.78	-4.19	6
-44	-82	-76	-8.32	-6.60	-14.37	7
-55	-37	-92	-7.28	-5.29	-12.19	8
-51	-97	-148	-7.15	-14.65	-20.76	9
+14	-4	+10	+9.46	-0.79	+8.60	10
-75	-220	-295	-6.98	-22.02	-27.47	11
+12,622	+18,949	+31,571	+12.12	+16.23	+30.32	12
+141	-5	+136	+6.36	-0.21	+6.14	13
-25	-83	-108	-2.55	-8.70	-11.03	14
-66	-41	-107	-5.49	-3.61	-8.89	15
-155	-23	-178	-10.52	-1.75	-12.08	16
+230	+2,634	+2,764	+2.04	+22.00	+24.49	17
-12	-132	-144	-1.00	-11.06	-11.95	18
-90	-37	-127	-9.39	-4.26	-13.26	19
-73	-28	-101	-24.17	-12.23	-33.44	20
+5,980	+7,742	+13,722	+27.29	+27.75	+62.61	21
-	-	-	-	-	-	22
-	-	-	-	-	-	23
-	-	-	-	-	-	24
-	-	-	-	-	-	25
-	-	-	-	-	-	26
-	-	-	-	-	-	27
-	-	-	-	-	-	28
+276	+506	+782	+19.79	+30.17	+55.82	29
+123	+290	+413	+8.06	+17.59	+27.06	30
+200	-308	-108	+5.32	-7.78	-2.87	31
-25	-12	-37	-3.25	-4.32	-12.21	32
+419	+597	+1,016	+7.61	+10.08	+18.46	33
+24	+32	+56	+2.92	+3.78	+6.80	34
-122	-68	-190	-11.05	-6.92	-17.21	35
+4,235	+6,804	+10,939	+12.79	+17.58	+32.51	36
-	-	-	-	-	-	37
-	-	-	-	-	-	38
-	-	-	-	-	-	39
-	-	-	-	-	-	40
-	-	-	-	-	-	41
-	-	-	-	-	-	42
-	-	-	-	-	-	43
-	-	-	-	-	-	44
-30	-29	-59	-6.64	-6.87	-13.05	45
-177	-153	-330	-17.18	-17.94	-32.04	46
+1,374	+444	+2,218	+18.11	+9.42	+29.23	47
+299	+629	+928	+7.21	+14.14	+22.37	48
+96	+90	+186	+5.90	+5.22	+11.43	49
+1,240	+3,387	+4,627	+2.63	+6.99	+9.80	50
-99	+313	+214	-2.30	+7.45	+4.98	51
-39	-187	-226	-1.66	-8.11	-9.63	52
-71	-90	-161	-9.23	-12.89	-20.94	53
-76	-18	-94	-8.63	-2.24	-10.67	54
+95	+104	+199	+2.02	+2.42	+4.49	55
-33	-58	-91	-3.16	-5.74	-8.72	56
+9	-39	-30	+2.75	-11.61	-9.17	57
-24	+36	+12	-3.19	+4.94	+1.59	58
-101	-6	-107	-15.06	-1.13	-16.90	59
-191	-78	-269	-9.86	-4.46	-13.88	60
-128	-121	-249	-8.56	-8.85	-16.66	61
+31	+118	+149	+2.51	+9.31	+12.06	62
-135	-58	-193	-20.83	-11.31	-29.78	63
+724	+2,094	+2,818	+5.95	+16.24	+23.15	64
-	-	-	-	-	-	65
-	-	-	-	-	-	66
-	-	-	-	-	-	67
-	-	-	-	-	-	68
-	-	-	-	-	-	69



	COUNTIES, CITIES, AND TOWNS.	POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
	<b>HAMPSHIRE — Con.</b>			
	<b>NORTHAMPTON — Con.</b>			
1	Ward 6, . . . . .	-	1,596	1,855
2	Ward 7, . . . . .	-	1,868	1,985
3	Pelham, . . . . .	614	649	496
4	Plainfield, . . . . .	457	453	435
5	Prescott, . . . . .	460	448	376
6	Southampton, . . . . .	1,046	1,025	1,017
7	South Hadley, . . . . .	3,538	3,949	4,281
8	Ware, . . . . .	4,817	6,003	7,329
9	Westhampton, . . . . .	563	541	477
10	Williamsburg, . . . . .	2,234	2,044	2,057
11	Worthington, . . . . .	758	763	714
12	<b>MIDDLESEX.</b>	317,830	357,311	431,167
13	Acton, . . . . .	1,797	1,785	1,897
14	Arlington, . . . . .	4,100	4,673	5,029
15	Ashby, . . . . .	914	871	825
16	Ashland, . . . . .	2,304	2,633	2,532
17	Ayer, . . . . .	1,881	2,190	2,148
18	Bedford, . . . . .	931	930	1,092
19	Belmont, . . . . .	1,615	1,639	2,098
20	Billerica, . . . . .	2,000	2,161	2,380
21	Boxborough,* . . . . .	319	348	325
22	Burlington, . . . . .	711	604	617
23	CAMBRIDGE,†	52,669	59,538	70,028
24	Ward 1, . . . . .	9,555	10,271	12,811
25	Ward 2, . . . . .	14,841	16,711	19,172
26	Ward 3, . . . . .	10,134	11,541	12,761
27	Ward 4, . . . . .	12,383	14,341	16,994
28	Ward 5, . . . . .	5,756	6,794	8,290
29	Carlisle, . . . . .	478	526	481
30	Chelmsford, . . . . .	2,553	2,304	2,695
31	Concord, . . . . .	3,922	3,727	4,427
32	Dracut, . . . . .	1,595	1,927	1,996
33	Dunstable, . . . . .	453	431	416
34	Everett, . . . . .	4,159	5,825	11,068
35	Frammingham, . . . . .	6,235	8,275	9,239
36	Groton, . . . . .	1,862	1,987	2,057
37	Holliston, . . . . .	3,098	2,926	2,619
38	Hopkinton, . . . . .	4,601	3,922	4,068
39	Hudson, . . . . .	3,739	3,968	4,670
40	Lexington, . . . . .	2,460	2,718	3,197
41	Lincoln, . . . . .	907	901	967
42	Littleton,* . . . . .	994	1,067	1,025
43	LOWELL,†	59,475	64,107	77,696
44	Ward 1, . . . . .	11,715	10,710	11,398
45	Ward 2, . . . . .	8,962	9,811	13,189
46	Ward 3, . . . . .	10,091	12,056	14,298
47	Ward 4, . . . . .	8,861	10,406	12,860
48	Ward 5, . . . . .	10,900	12,392	15,967
49	Ward 6, . . . . .	8,916	8,732	9,984
50	MALDEN, . . . . .	12,017	16,407	23,031
51	Ward 1, . . . . .	-	2,890	3,054
52	Ward 2, . . . . .	-	3,122	4,398
53	Ward 3, . . . . .	-	2,500	3,010
54	Ward 4, . . . . .	-	3,039	2,916
55	Ward 5, . . . . .	-	2,012	2,718
56	Ward 6, . . . . .	-	2,824	3,715
57	Ward 7, . . . . .	-	-	3,220
58	MARLBOROUGH,‡	10,127	10,941	13,805
59	Maynard, . . . . .	2,291	2,703	2,700
60	Medford, . . . . .	7,573	9,042	11,079
61	Melrose, . . . . .	4,560	6,101	8,519
62	Natick, . . . . .	8,479	8,480	9,118
63	Newton, . . . . .	16,905	19,759	24,379
64	Ward 1, . . . . .	2,433	2,968	3,434
65	Ward 2, . . . . .	2,883	3,606	4,569
66	Ward 3, . . . . .	2,560	3,011	3,732
67	Ward 4, . . . . .	2,673	3,083	3,579
68	Ward 5, . . . . .	1,942	2,958	3,127

\* Boundary line established between Boxborough and Littleton, April 30, 1890.

† Part of Watertown annexed to Cambridge, March 10, 1885.

‡ Part of Tewksbury annexed to Lowell, May 17, 1888.

§ Became a city, January 1, 1891. Population for 1890 not distributed by wards.

INCREASE (+), OR DECREASE (-), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN —			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-	-	-	-	-	-	1
-	-	-	-	-	-	2
-65	-63	-128	-10.69	-11.48	-20.85	3
-4	-18	-22	-0.88	-3.97	-4.81	4
-12	-72	-84	-2.61	-16.07	-18.26	5
-21	-8	-29	-2.01	-0.78	-2.77	6
+111	+312	+723	+11.62	+7.90	+20.44	7
+1,186	+1,326	+2,512	+24.62	+22.09	+62.15	8
-22	-64	-86	-3.91	-11.83	-15.28	9
-190	+13	-177	-8.50	+0.64	-7.92	10
+5	-49	-44	+0.66	-6.42	-5.80	11
+39,481	+73,856	+113,337	+12.42	+20.67	+35.66	12
-12	+112	+100	-0.67	+6.27	+5.56	13
+573	+956	+1,529	+13.98	+20.46	+37.29	14
-48	-46	-89	-4.70	-5.28	-9.74	15
+239	-101	+138	+9.98	-3.84	+5.76	16
+309	-42	+267	+16.43	-1.92	+14.19	17
-1	+162	+161	-0.11	+17.42	+17.29	18
+24	+459	+483	+1.49	+28.00	+29.91	19
+161	+219	+390	+8.05	+10.13	+19.00	20
+29	-23	+6	+0.09	-6.61	+1.88	21
-107	+13	-94	-15.05	+2.15	-13.22	22
+6,999	+10,370	+17,359	+13.27	+17.38	+32.96	23
-	-	-	-	-	-	24
-	-	-	-	-	-	25
-	-	-	-	-	-	26
-	-	-	-	-	-	27
-	-	-	-	-	-	28
+18	-45	+3	+10.04	-8.56	+0.63	29
-219	+391	+142	-9.75	+16.97	+5.56	30
-195	+700	+505	-4.97	+18.78	+12.89	31
+332	+69	+401	+20.82	+3.58	+25.14	32
-22	-15	-37	-4.86	-3.48	-8.17	33
+1,666	+5,243	+6,909	+40.08	+90.01	+166.12	34
+2,040	+964	+3,004	+32.72	+11.65	+48.18	35
+125	+70	+195	+8.71	+3.62	+10.47	36
-172	-307	-479	-5.55	-10.49	-15.46	37
-679	+166	-513	-14.76	+4.23	-11.15	38
+229	+702	+931	+8.12	+17.69	+24.90	39
+258	+479	+737	+10.49	+17.62	+29.96	40
-6	+86	+80	-0.66	+9.54	+8.82	41
+73	-42	+31	+7.34	-3.94	+3.12	42
+4,632	+13,589	+18,221	+7.79	+21.20	+30.64	43
-	-	-	-	-	-	44
-	-	-	-	-	-	45
-	-	-	-	-	-	46
-	-	-	-	-	-	47
-	-	-	-	-	-	48
+4,390	+6,624	+11,014	+36.53	+40.37	+91.65	49
-	-	-	-	-	-	50
-	-	-	-	-	-	51
-	-	-	-	-	-	52
-	-	-	-	-	-	53
-	-	-	-	-	-	54
-	-	-	-	-	-	55
-	-	-	-	-	-	56
-	-	-	-	-	-	57
+314	+2,864	+3,678	+8.04	+26.18	+36.32	58
+412	-3	+409	+17.98	-0.11	+17.85	59
+1,409	+2,037	+3,506	+19.40	+22.53	+46.30	60
+1,541	+2,418	+3,959	+33.79	+39.63	+56.82	61
-19	+658	+639	-0.22	+7.78	+7.54	62
+2,764	+4,620	+7,384	+16.26	+23.38	+43.45	63
-	-	-	-	-	-	64
-	-	-	-	-	-	65
-	-	-	-	-	-	66
-	-	-	-	-	-	67
-	-	-	-	-	-	68

COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
MIDDLESEX — Con.				
	NEWTON — Con.			
1	Ward 6, . . . . .	2,544	3,017	3,772
2	Ward 7, . . . . .	1,960	2,016	2,166
3	North Reading, . . . . .	900	878	874
4	Pepperell, . . . . .	2,348	2,587	3,127
5	Reading, . . . . .	3,181	3,539	4,088
6	Sherborn, . . . . .	1,401	1,391	1,381
7	Shirley, . . . . .	1,366	1,242	1,191
8	SOMERVILLE, . . . . .	24,933	29,971	40,152
9	Ward 1, . . . . .	7,846	8,993	10,115
10	Ward 2, . . . . .	8,198	10,077	13,209
11	Ward 3, . . . . .	4,272	5,564	8,538
12	Ward 4, . . . . .	4,617	5,337	8,290
13	Stoneham,* . . . . .	4,890	5,659	6,155
14	Stow, . . . . .	1,045	976	903
15	Sudbury, . . . . .	1,178	1,165	1,197
16	Tewksbury,† . . . . .	2,179	2,333	2,515
17	Townsend, . . . . .	1,967	1,846	1,750
18	Tyngsborough, . . . . .	631	604	662
19	Wakefield,* . . . . .	5,547	6,060	6,982
20	WALTHAM, . . . . .	11,712	14,609	18,707
21	Ward 1, . . . . .	-	2,514	2,899
22	Ward 2, . . . . .	-	1,099	1,710
23	Ward 3, . . . . .	-	2,361	2,747
24	Ward 4, . . . . .	-	2,570	3,296
25	Ward 5, . . . . .	-	2,037	2,393
26	Ward 6, . . . . .	-	1,923	2,964
27	Ward 7, . . . . .	-	2,105	2,698
28	Watertown,† . . . . .	5,426	6,238	7,073
29	Wayland, . . . . .	1,962	1,916	2,060
30	Westford, . . . . .	2,147	2,193	2,250
31	Weston, . . . . .	1,448	1,427	1,664
32	Wilmington, . . . . .	933	901	1,213
33	Winchester, . . . . .	3,802	4,390	4,861
34	WOBURN,§ . . . . .	10,931	11,750	13,499
35	Ward 1, . . . . .	-	-	2,471
36	Ward 2, . . . . .	-	-	2,728
37	Ward 3, . . . . .	-	-	2,643
38	Ward 4, . . . . .	-	-	2,428
39	Ward 5, . . . . .	-	-	1,013
40	Ward 6, . . . . .	-	-	1,224
41	Ward 7, . . . . .	-	-	992
42	NANTUCKET.	3,727	3,142	3,268
43	Nantucket, . . . . .	3,727	3,142	3,268
44	NORFOLK.	96,507	102,142	118,950
45	Avon,   . . . . .	-	-	1,384
46	Bellingham, . . . . .	1,223	1,198	1,334
47	Braintree, . . . . .	3,555	4,040	4,848
48	Brookline,** . . . . .	8,057	9,196	12,103
49	Canton, . . . . .	4,516	4,380	4,568
50	Cohasset, . . . . .	2,182	2,216	2,448
51	Dedham, . . . . .	6,233	6,641	7,123
52	Dover, . . . . .	653	664	727
53	Foxborough, . . . . .	2,950	2,814	2,933
54	Franklin, . . . . .	4,051	3,983	4,831
55	Holbrook,   . . . . .	2,130	2,334	2,474
56	Hyde Park, . . . . .	7,088	8,376	10,193
57	Medfield, . . . . .	1,371	1,594	1,493
58	Medway,†† . . . . .	3,956	2,777	2,985
59	Mills,†† . . . . .	-	893	786
60	Milton,‡‡ . . . . .	3,206	3,556	4,278

\* Part of Stoneham annexed to Wakefield, March 13, 1889.

† Part of Tewksbury annexed to Lowell, May 17, 1888.

‡ Part of Watertown annexed to Cambridge, March 10, 1885.

§ Became a city, January 1, 1889.

|| The town of Avon was set off from the town of Stoughton, February 21, 1888. Parts of Holbrook and Randolph annexed to Avon, April 16, 1889.

\*\* Boundary line between Brookline and city of Boston changed and established, May 27, 1890.

†† The town of Mills was set off from the town of Medway, February 24, 1885.

‡‡ Boundary line established between Milton and Quincy, April 16, 1885.

INCREASE (+), OR DECREASE (-), IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN—			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-	-	-	-	-	-	1
-22	-4	-26	-2.44	-0.46	-2.89	2
+230	+540	+779	+10.18	+20.87	+35.18	3
+358	+549	+907	+11.25	+15.51	+28.51	4
-10	-10	-20	-0.71	-0.72	-1.43	5
-123	-51	-174	-9.01	-4.11	-12.75	6
+5,038	+10,181	+15,219	+20.21	+33.97	+61.04	7
-	-	-	-	-	-	8
-	-	-	-	-	-	9
-	-	-	-	-	-	10
-	-	-	-	-	-	11
+760	+496	+1,265	+15.73	+8.76	+25.87	12
-69	-73	-142	-6.60	-7.48	-13.59	13
-13	+32	+19	-1.10	+2.75	+1.61	14
+154	+182	+336	+7.07	+7.80	+15.42	15
-121	-96	-217	-6.15	-5.20	-11.03	16
-27	+58	+31	-4.28	+9.60	+4.91	17
+513	+922	+1,435	+9.25	+15.21	+25.87	18
+2,907	+4,093	+6,995	+24.74	+28.05	+59.73	19
-	-	-	-	-	-	20
-	-	-	-	-	-	21
-	-	-	-	-	-	22
-	-	-	-	-	-	23
-	-	-	-	-	-	24
-	-	-	-	-	-	25
-	-	-	-	-	-	26
-	-	-	-	-	-	27
+812	+535	+1,047	+14.96	+13.39	+30.35	28
-16	+114	+98	-0.82	+5.86	+4.99	29
+46	+57	+103	+2.14	+2.60	+4.80	30
-21	+237	+216	-1.45	+16.61	+14.92	31
+58	+222	+280	+6.22	+22.40	+30.01	32
+588	+471	+1,059	+15.47	+10.73	+27.85	33
+819	+1,749	+2,568	+7.49	+14.89	+25.49	34
-	-	-	-	-	-	35
-	-	-	-	-	-	36
-	-	-	-	-	-	37
-	-	-	-	-	-	38
-	-	-	-	-	-	39
-	-	-	-	-	-	40
-	-	-	-	-	-	41
-585	+126	-459	-15.70	+4.01	-12.32	42
-585	+126	-459	-15.70	+4.01	-12.32	43
+5,635	+16,908	+22,443	+5.84	+16.46	+23.26	44
-	+1,384	+1,384	-	-	-	45
-25	+136	+111	-2.04	+11.35	+9.08	46
+185	+908	+903	+4.80	+20.00	+25.76	47
+1,139	+2,907	+4,046	+14.14	+31.61	+50.22	48
-136	+158	+22	-3.01	+3.61	+0.49	49
+34	+232	+266	+1.56	+10.47	+12.19	50
+408	+482	+890	+6.55	+7.26	+14.28	51
+11	+63	+74	+1.68	+9.49	+11.33	52
-186	+119	-17	-4.61	+4.23	-0.58	53
-68	+848	+780	-1.68	+21.29	+19.25	54
+204	+140	+344	+9.58	+6.00	+16.15	55
+1,288	+1,817	+3,105	+18.17	+21.69	+43.81	56
+223	+101	+122	+16.27	-6.34	-8.90	57
-1,179	+206	-971	-29.80	+7.49	-24.54	58
+693	+103	+786	-	+15.08	-	59
+349	+723	+1,072	+10.89	+20.34	+33.44	60

COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
NORFOLK — Con.				
1	Needham,* . . . . .	5,252	2,586	3,085
2	Norfolk, . . . . .	930	825	913
3	Norwood, . . . . .	2,345	2,921	3,733
4	QUINCY,† . . . . .	10,670	12,145	16,723
5	Ward 1, . . . . .	-	-	2,209
6	Ward 2, . . . . .	-	-	2,383
7	Ward 3, . . . . .	-	-	3,741
8	Ward 4, . . . . .	-	-	4,164
9	Ward 5, . . . . .	-	-	1,812
10	Ward 6, . . . . .	-	-	1,354
11	Randolph,‡ . . . . .	4,027	3,807	3,946
12	Sharon, . . . . .	1,492	1,328	1,634
13	Stoughton,§ . . . . .	4,875	5,173	4,852
14	Walpole, . . . . .	2,494	2,443	2,604
15	Wellesley,* . . . . .	-	3,013	3,600
16	Weymouth, . . . . .	10,570	10,740	10,866
17	Wrentham, . . . . .	2,481	2,710	2,566
PLYMOUTH.				
18		74,018	81,680	92,700
19	Abington, . . . . .	3,697	3,699	4,280
20	Bridgewater, . . . . .	3,620	3,827	4,249
21	BROCKTON, . . . . .	13,608	20,783	27,294
22	Ward 1, . . . . .	-	2,418	2,751
23	Ward 2, . . . . .	-	2,993	3,796
24	Ward 3, . . . . .	-	3,120	4,922
25	Ward 4, . . . . .	-	3,110	4,155
26	Ward 5, . . . . .	-	2,990	4,098
27	Ward 6, . . . . .	-	3,218	3,674
28	Ward 7, . . . . .	-	2,934	3,898
29	Carver, . . . . .	1,039	1,091	994
30	Duxbury, . . . . .	2,198	1,924	1,908
31	East Bridgewater, . . . . .	2,710	2,312	2,911
32	Hallfax, . . . . .	542	530	562
33	Hanover,   . . . . .	1,897	1,966	2,093
34	Hanson, . . . . .	1,300	1,227	1,267
35	Hingham, . . . . .	4,485	4,376	4,564
36	Hull, . . . . .	383	451	989
37	Kingston, . . . . .	1,524	1,570	1,659
38	Lakeville, . . . . .	1,008	980	935
39	Marion, . . . . .	958	965	871
40	Marshfield, . . . . .	1,781	1,649	1,713
41	Mattapoisett, . . . . .	1,365	1,215	1,148
42	Middleborough, . . . . .	5,237	6,163	6,065
43	Norwell,** . . . . .	1,820	1,689	1,635
44	Pembroke,   . . . . .	1,406	1,313	1,320
45	Plymouth, . . . . .	7,093	7,239	7,314
46	Plympton, . . . . .	694	600	597
47	Rochester, . . . . .	1,043	1,021	1,012
48	Rockland, . . . . .	4,553	4,785	5,213
49	Scituate, . . . . .	2,466	2,350	2,318
50	Wareham, . . . . .	2,896	3,254	3,461
51	West Bridgewater, . . . . .	1,665	1,707	1,917
52	Whitman,†† . . . . .	3,024	3,595	4,441
SUFFOLK.				
53		387,927	421,109	484,780
54	Boston,†† . . . . .	362,839	390,393	448,477
55	Ward 1, . . . . .	14,773	15,659	19,633
56	Ward 2, . . . . .	15,153	15,780	17,297
57	Ward 3, . . . . .	11,514	12,328	13,064
58	Ward 4, . . . . .	11,257	12,518	12,842
59	Ward 5, . . . . .	10,960	12,827	12,412
60	Ward 6, . . . . .	16,904	17,256	18,447

\* The town of Wellesley was set off from the town of Needham, April 6, 1881.

† Boundary line established between Quincy and Milton, April 16, 1885. Became a city, January 1, 1889.

‡ Part of Randolph annexed to Avon, April 16, 1889.

§ The town of Avon was set off from the town of Stoughton, February 21, 1888.

|| Boundary line established between Hanover and Pembroke, April 23, 1885.

\*\* Name changed from South Scituate, by Act of February 27, 1888. Accepted by the town, March 5, 1888.

†† Name changed from South Abington, by Act of March 5, 1886. Accepted by the town, May 3, 1886.

†† Boundary line changed and established between the city of Boston and Brookline, May 27, 1890.

INCREASE (+), OR DECREASE (—), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (—), IN —			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
—2,066	+449	—2,217	—50.76	+17.36	—42.21	1
—105	+88	—17	—11.29	+10.67	—1.83	2
+576	+812	+1,388	+24.56	+27.80	+59.19	3
+1,575	+4,578	+6,153	+14.90	+37.69	+58.21	4
—	—	—	—	—	—	5
—	—	—	—	—	—	6
—	—	—	—	—	—	7
—	—	—	—	—	—	8
—	—	—	—	—	—	9
—	—	—	—	—	—	10
—220	+139	—81	—5.46	+3.65	—2.01	11
—164	+306	+142	—10.99	+23.04	+8.52	12
+298	—321	—23	+6.11	—6.21	—0.47	13
—51	+161	+110	—2.04	+6.59	+4.41	14
+3,013	+587	+3,600	—	+19.48	—	15
+170	+126	+296	+1.61	+1.17	+2.80	16
+229	—144	+85	+9.23	—5.31	+3.43	17
+7,692	+11,020	+13,682	+10.35	+13.49	+25.24	18
+2	+561	+563	+0.05	+15.17	+15.23	19
+207	+422	+629	+5.72	+11.03	+17.38	20
+7,175	+6,511	+13,696	+52.73	+31.33	+100.67	21
—	—	—	—	—	—	22
—	—	—	—	—	—	23
—	—	—	—	—	—	24
—	—	—	—	—	—	25
—	—	—	—	—	—	26
—	—	—	—	—	—	27
—	—	—	—	—	—	28
+52	—97	—45	+5.00	—3.89	—4.33	29
—272	—16	—288	—12.39	—0.83	—13.11	30
+102	+99	+201	+3.76	+3.52	+7.42	31
—12	+32	+20	—2.21	+6.04	+3.69	32
+69	+127	+196	+3.64	+6.46	+10.33	33
—82	+40	—42	—6.26	+3.26	—3.21	34
—110	+189	+79	—2.45	+4.32	+1.76	35
+68	+538	+606	+17.75	+119.29	+158.22	36
+46	+89	+135	+3.02	+5.67	+8.86	37
—28	—45	—73	—2.78	—4.59	—7.24	38
+7	—84	—87	+0.73	—9.74	—9.08	39
—132	+64	—68	—7.41	+3.88	—3.82	40
—150	—67	—217	—10.99	—5.51	—15.90	41
—74	+902	+828	—1.41	+17.47	+15.81	42
—231	+46	—185	—12.69	+2.89	—10.16	43
—92	+7	—85	—6.55	+0.53	—6.05	44
+146	+75	+221	+2.06	+1.04	+3.12	45
—94	—3	—97	—13.54	—0.50	—13.98	46
—22	—9	—31	—2.11	—0.88	—2.97	47
+232	+428	+660	+5.10	+3.94	+14.50	48
—116	—32	—148	—4.70	—1.36	—6.00	49
+358	+197	+555	+12.36	+6.05	+19.16	50
+42	+210	+252	+2.52	+12.30	+15.14	51
+571	+846	+1,417	+18.88	+23.53	+46.86	52
+33,182	+63,671	+96,853	+8.55	+15.12	+24.97	53
+27,554	+58,084	+85,638	+7.59	+14.88	+23.60	54
—	—	—	—	—	—	55
—	—	—	—	—	—	56
—	—	—	—	—	—	57
—	—	—	—	—	—	58
—	—	—	—	—	—	59
—	—	—	—	—	—	60

COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
<b>SUFFOLK — Con.</b>				
	<b>Boston — Con.</b>			
1	Ward 7, . . . . .	12,550	12,038	13,145
2	Ward 8, . . . . .	12,792	11,986	13,028
3	Ward 9, . . . . .	12,611	11,239	12,660
4	Ward 10, . . . . .	11,503	9,746	8,205
5	Ward 11, . . . . .	16,802	17,863	21,660
6	Ward 12, . . . . .	14,696	13,845	12,585
7	Ward 13, . . . . .	21,462	22,547	22,375
8	Ward 14, . . . . .	20,005	22,741	26,367
9	Ward 15, . . . . .	14,902	16,237	18,049
10	Ward 16, . . . . .	15,184	16,459	18,048
11	Ward 17, . . . . .	14,445	14,747	15,638
12	Ward 18, . . . . .	13,142	14,140	16,035
13	Ward 19, . . . . .	19,971	20,557	23,016
14	Ward 20, . . . . .	17,391	20,994	24,335
15	Ward 21, . . . . .	14,711	15,627	22,930
16	Ward 22, . . . . .	12,715	15,838	20,011
17	Ward 23, . . . . .	14,032	17,425	24,997
18	Ward 24, . . . . .	16,871	21,500	29,638
19	Ward 25, . . . . .	6,693	8,516	12,032
20	<b>CHELSEA, . . . . .</b>	21,782	25,709	27,909
21	Ward 1, . . . . .	4,987	5,570	5,413
22	Ward 2, . . . . .	6,041	6,797	7,072
23	Ward 3, . . . . .	4,958	6,169	7,131
24	Ward 4, . . . . .	5,796	7,173	8,293
25	Revere, . . . . .	2,263	3,637	5,668
26	Winthrop, . . . . .	1,043	1,370	2,726
27	<b>WORCESTER.</b>	226,897	244,039	280,787
28	Ashburnham, . . . . .	1,666	2,058	2,074
29	Athol, . . . . .	4,307	4,758	6,319
30	Auburn, . . . . .	1,317	1,268	1,532
31	Barre, . . . . .	2,419	2,093	2,239
32	Berlin, . . . . .	977	899	894
33	Blackstone, . . . . .	4,907	5,436	6,138
34	Bolton, . . . . .	903	876	827
35	Boylston, . . . . .	854	834	770
36	Brookfield, . . . . .	2,820	3,013	3,352
37	Charlton, . . . . .	1,900	1,823	1,847
38	CClinton, . . . . .	8,029	8,945	10,424
39	Dana, . . . . .	736	695	700
40	Douglas, . . . . .	2,241	2,205	1,908
41	Dudley, . . . . .	2,803	2,742	2,944
42	<b>FITCHBURG.</b>	12,429	15,375	22,037
43	Ward 1, . . . . .	2,438	3,151	4,058
44	Ward 2, . . . . .	2,204	2,726	6,238
45	Ward 3, . . . . .	2,028	2,293	3,195
46	Ward 4, . . . . .	1,684	1,989	2,252
47	Ward 5, . . . . .	1,868	2,283	3,316
48	Ward 6, . . . . .	2,207	2,934	3,978
49	Gardner, . . . . .	4,988	7,283	8,424
50	Grafton, . . . . .	4,030	4,498	5,002
51	Hardwick, . . . . .	2,233	3,145	2,922
52	Harvard, . . . . .	1,253	1,184	1,095
53	Holden, . . . . .	2,499	2,471	2,623
54	Hopedale,* . . . . .	—	—	1,176
55	Hubbardston, . . . . .	1,386	1,303	1,346
56	Lancaster, . . . . .	2,008	2,050	2,201
57	Leicester, . . . . .	2,779	2,923	3,120
58	Leominster, . . . . .	5,772	6,297	7,269
59	Lunenburg, . . . . .	1,101	1,071	1,146
60	Mendon, . . . . .	1,694	945	919
61	Milford,* . . . . .	9,310	9,343	8,780
62	Millbury, . . . . .	4,741	4,555	4,428
63	New Braintree, . . . . .	610	558	573
64	Northborough, . . . . .	1,676	1,858	1,952
65	Northbridge, . . . . .	4,053	3,786	4,003
66	North Brookfield, . . . . .	4,459	4,201	3,871
67	Oakham, . . . . .	869	749	738
68	Oxford, . . . . .	2,604	2,355	2,616
69	Paxton, . . . . .	592	561	445

\* The town of Hopedale was set off from the town of Milford, April 7, 1886.

INCREASE (+), OR DECREASE (-), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN —			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-	-	-	-	-	-	1
-	-	-	-	-	-	2
-	-	-	-	-	-	3
-	-	-	-	-	-	4
-	-	-	-	-	-	5
-	-	-	-	-	-	6
-	-	-	-	-	-	7
-	-	-	-	-	-	8
-	-	-	-	-	-	9
-	-	-	-	-	-	10
-	-	-	-	-	-	11
-	-	-	-	-	-	12
-	-	-	-	-	-	13
-	-	-	-	-	-	14
-	-	-	-	-	-	15
-	-	-	-	-	-	16
-	-	-	-	-	-	17
-	-	-	-	-	-	18
+3,927	+2,200	+6,127	+18.03	+8.66	+28.13	19
-	-	-	-	-	-	20
-	-	-	-	-	-	21
-	-	-	-	-	-	22
-	-	-	-	-	-	23
+1,374	+2,031	+3,405	+60.72	+55.84	+150.46	24
+327	+1,356	+1,683	+31.35	+98.98	+161.36	25
-	-	-	-	-	-	26
+17,142	+36,748	+53,890	+7.55	+16.06	+23.75	27
+392	+16	+408	+23.53	+0.78	+24.49	28
+451	+1,561	+2,012	+10.47	+32.81	+46.71	29
-49	+264	+215	-3.72	+20.92	+16.32	30
-326	+146	-180	-13.48	+6.98	-7.44	31
-78	-15	-93	-7.98	-1.67	-9.52	32
+529	+702	+1,231	+10.78	+12.91	+25.09	33
-27	-40	-76	-2.99	-5.59	-8.42	34
-20	-64	-84	-2.34	-7.67	-9.84	35
+193	+339	+532	+6.84	+11.25	+18.87	36
-77	+24	-53	-4.05	+1.32	-2.79	37
+916	+1,479	+2,395	+11.41	+16.54	+29.63	38
-41	-5	-36	-5.57	+0.72	-4.89	39
-36	-297	-333	-1.61	-13.47	-14.86	40
-61	+202	+141	-2.18	+7.37	+5.03	41
+2,946	+6,662	+9,608	+23.70	+43.33	+77.39	42
-	-	-	-	-	-	43
-	-	-	-	-	-	44
-	-	-	-	-	-	45
-	-	-	-	-	-	46
-	-	-	-	-	-	47
-	-	-	-	-	-	48
+2,295	+1,141	+3,436	+46.01	+15.67	+68.99	49
+468	+504	+972	+11.61	+11.20	+24.12	50
+912	-223	+689	+40.84	-7.09	+30.86	51
-69	89	-158	-5.51	-7.52	-12.61	52
-28	+152	+124	-1.12	+6.16	+4.96	53
-	+1,176	+1,176	-	-	-	54
-83	+43	-40	-5.99	+3.80	-2.89	55
+42	+151	+193	+2.09	+7.37	+9.61	56
+144	+197	+341	+5.18	+6.74	+12.27	57
-475	+1,972	+1,497	-8.23	+37.28	+25.64	58
-30	+75	+45	-2.72	+7.00	+4.09	59
-149	-26	-175	-13.62	-2.75	-10.00	60
+33	-563	-530	+0.35	-6.03	-5.69	61
-186	-127	-313	-3.92	-2.79	-6.60	62
-52	+15	-87	-8.52	+2.69	-6.07	63
+177	+99	+276	+10.56	+5.34	+15.47	64
-207	+317	+550	-6.59	+21.65	+13.57	65
-258	-330	-588	-5.79	-7.86	-13.19	66
-120	-11	-131	-13.81	-1.47	-15.07	67
-249	+261	+12	-9.56	+11.08	+0.46	68
-31	-116	-147	-5.24	-20.68	-24.88	69



COUNTIES, CITIES, AND TOWNS.		POPULATION		
		U. S. Census 1880	State Census 1885	U. S. Census 1890
WORCESTER—Con.				
1	Petersham, . . . . .	1,109	1,032	1,050
2	Phillipston, . . . . .	621	530	502
3	Princeton, . . . . .	1,100	1,038	982
4	Royalston, . . . . .	1,192	1,153	1,030
5	Rutland, . . . . .	1,059	968	980
6	Shrewsbury, . . . . .	1,500	1,450	1,449
7	Southborough, . . . . .	2,142	2,100	2,114
8	Southbridge, . . . . .	6,464	6,500	7,655
9	Spencer, . . . . .	7,466	8,247	8,747
10	Sterling, . . . . .	1,414	1,331	1,244
11	Sturbridge, . . . . .	2,062	1,980	2,074
12	Sutton, . . . . .	3,105	3,101	3,180
13	Templeton, . . . . .	2,789	2,627	2,999
14	Upton, . . . . .	2,023	2,265	1,878
15	Uxbridge, . . . . .	3,111	2,948	3,408
16	Warren, . . . . .	3,889	4,032	4,631
17	Webster, . . . . .	5,696	6,220	7,031
18	Westborough, . . . . .	6,214	4,880	5,195
19	West Boylston, . . . . .	2,994	2,927	3,019
20	West Brookfield, . . . . .	1,917	1,747	1,692
21	Westminster, . . . . .	1,662	1,556	1,688
22	Winchendon, . . . . .	3,722	3,872	4,390
23	WORCESTER, . . . . .	68,291	68,389	84,655
24	Ward 1, . . . . .	6,399	7,034	8,046
25	Ward 2, . . . . .	8,586	10,692	13,980
26	Ward 3, . . . . .	8,393	9,056	9,258
27	Ward 4, . . . . .	6,837	8,101	9,839
28	Ward 5, . . . . .	10,424	12,446	16,563
29	Ward 6, . . . . .	6,055	6,782	8,843
30	Ward 7, . . . . .	5,993	7,626	10,328
31	Ward 8, . . . . .	5,634	6,652	7,798

## RECAPITULATION. FOR THE STATE AND COUNTIES.

	THE STATE, AND COUNTIES.	NUMBER OF CITIES AND TOWNS		
		1880		
		Cities	Towns	Total
1	THE STATE.	23	322	345
2	Barnstable, . . . . .	-	14	14
3	Berkshire, . . . . .	-	32	32
4	Bristol, . . . . .	3	16	19
5	Dukes, . . . . .	-	6	6
6	Essex, . . . . .	6	29	35
7	Franklin, . . . . .	-	26	26
8	Hampden, . . . . .	2	20	22
9	Hampshire, . . . . .	1	22	23
10	Middlesex, . . . . .	6	48	54
11	Nantucket, . . . . .	-	1	1
12	Norfolk, . . . . .	-	24	24
13	Plymouth, . . . . .	1	26	27
14	Suffolk, . . . . .	2	2	4
15	Worcester, . . . . .	2	56	58

INCREASE (+), OR DECREASE (-), IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN—			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
-77	+18	-59	-6.94	+1.74	-5.32	1
-91	-28	-119	-14.63	-5.28	-19.16	2
-62	-56	-118	-5.64	-5.39	-10.73	3
-39	-123	-162	-3.27	-10.67	-13.59	4
-26	+17	-79	-9.07	+1.77	-7.46	5
-50	-1	-51	-3.33	-0.07	-3.40	6
-42	+14	-28	-1.96	+0.67	-1.31	7
+36	+1,155	+1,191	+0.56	+17.77	+18.43	8
+781	+500	+1,281	+10.46	+6.06	+17.16	9
-83	-87	-170	-5.87	-6.54	-12.02	10
-82	+94	+12	-3.98	+4.75	+0.58	11
-4	+79	+75	-0.13	+2.55	+2.42	12
-162	+372	+210	-5.81	+14.16	+7.53	13
+242	-387	-145	+11.96	-17.09	-7.17	14
-163	+460	+297	-5.24	+15.60	+9.55	15
+143	+649	+792	+3.68	+16.10	+20.37	16
+524	+811	+1,335	+9.20	+13.04	+23.44	17
-334	+315	-19	-6.41	+6.45	-0.36	18
-67	+92	+25	-2.24	+3.14	+0.84	19
-170	-165	-325	-8.87	-8.87	-16.95	20
-96	+132	+36	-5.81	+8.48	+2.18	21
+150	+518	+668	+4.03	+13.38	+17.95	22
+10,098	+16,266	+26,364	+17.32	+23.78	+45.23	23
-	-	-	-	-	-	24
-	-	-	-	-	-	25
-	-	-	-	-	-	26
-	-	-	-	-	-	27
-	-	-	-	-	-	28
-	-	-	-	-	-	29
-	-	-	-	-	-	30
-	-	-	-	-	-	31

## RECAPITULATION. FOR THE STATE AND COUNTIES.

NUMBER OF CITIES AND TOWNS						
1885			1890			
Cities	Towns	Total	Cities	Towns	Total	
23	325	348	28	323	351	1
-	15	15	-	15	15	2
-	32	32	1	31	32	3
3	16	19	3	17	20	4
-	6	6	-	6	6	5
6	29	35	6	29	35	6
-	26	26	-	26	26	7
2	20	22	3	19	22	8
1	22	23	1	22	23	9
6	48	54	8	46	54	10
-	1	1	-	1	1	11
-	26	26	1	26	27	12
1	26	27	1	26	27	13
2	2	4	2	2	4	14
2	56	58	2	57	59	15

## RECAPITULATION. FOR THE STATE AND COUNTIES — Concluded.

	THE STATE, AND COUNTIES.	POPULATION		
		U. S. Census 1880	State Census 1883	U. S. Census 1890
1	THE STATE.	1,783,085	1,942,141	2,238,943
2	Barnstable, . . . . .	31,897	29,845	29,172
3	Berkshire, . . . . .	69,032	73,828	81,108
4	Bristol, . . . . .	139,040	158,498	186,465
5	Dukes, . . . . .	4,300	4,135	4,809
6	Essex, . . . . .	244,535	263,727	299,995
7	Franklin, . . . . .	36,001	37,449	38,610
8	Hampden, . . . . .	104,142	116,764	135,713
9	Hampshire, . . . . .	47,282	48,472	51,859
10	Middlesex, . . . . .	317,830	357,311	431,167
11	Nantucket, . . . . .	3,727	3,142	3,268
12	Norfolk, . . . . .	96,507	102,142	118,950
13	Plymouth, . . . . .	74,018	81,680	92,700
14	Suffolk, . . . . .	387,927	421,109	484,780
15	Worcester, . . . . .	226,897	244,039	280,787

## RECAPITULATION. FOR THE STATE AND COUNTIES — Concluded.

INCREASE (+), OR DECREASE (—), IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (—), IN			
1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	1885 as compared with 1880	1890 as compared with 1885	1890 as compared with 1880	
+150,056	+296,802	+455,858	+8.92	+15.28	+25.57	1
—2,052	—673	—2,725	—6.43	—2.25	—8.54	2
+4,796	+7,280	+12,076	+6.95	+9.86	+17.49	3
+19,458	+27,967	+47,425	+13.99	+17.65	+34.11	4
—165	+234	+69	—3.84	+5.66	+1.60	5
+19,192	+36,268	+55,460	+7.85	+13.75	+22.68	6
+1,448	+1,161	+2,609	+4.02	+3.10	+7.25	7
+12,622	+18,949	+31,571	+12.12	+16.23	+30.32	8
+1,240	+3,387	+4,627	+2.63	+6.99	+9.80	9
+39,481	+73,856	+113,337	+12.42	+20.67	+35.66	10
—585	+126	—459	—15.70	+4.01	—12.32	11
+5,635	+16,808	+22,443	+5.84	+16.46	+23.26	12
+7,662	+11,020	+18,682	+10.35	+13.49	+25.24	13
+33,182	+63,671	+96,853	+8.56	+15.12	+24.97	14
+17,142	+36,748	+53,890	+7.55	+15.06	+23.75	15

## ANALYSIS.

The total population of the State, June, 1890, as shown in the table, was 2,238,943, as against 1,942,141 in May, 1885, the date of the latest Decennial Census, and 1,783,085 in June, 1880, the date of the previous United States Census. The gain in the decade is 25.57 per cent, and in the five years from 1885 to 1890, 15.28 per cent. In the five years from 1880 to 1885 the gain was 8.92 per cent, showing that the population of the Commonwealth increased faster during the last half of the decade than during the first half.

The county of Barnstable shows a decrease in population in 1890 as compared with 1885. Every other county shows a gain since 1885, the county of Middlesex leading, its gain being 20.67 per cent, and the county of Franklin showing the least gain, its increase being 3.10 per cent. In the ten years from 1880 to 1890 two counties show a decline, namely, Barnstable and Nantucket, their losses being 8.54 per cent and 12.32 per cent, respectively. Not only during the last five years but for the entire decade the county of Middlesex leads, its gain in 1890 as compared with 1880 being 35.66 per cent. The county of Bristol follows it closely, its gain for the decade being 34.11 per cent. Next comes the county of Hampden with a gain of 30.32 per cent. The counties of Essex, Norfolk, Plymouth, Suffolk, and Worcester each show a nearly uniform growth, the percentages being, respectively, 22.68, 23.26, 25.24, 24.97, and 23.75. The gain in the county of Berkshire is 17.49 per cent for the decade; in the county of Hampshire, 9.80 per cent; and in the county of Franklin, 7.25 per cent. In the county of Dukes the gain is very small, being only 1.60 per cent for the ten years. The Commonwealth now contains 278.48 inhabitants to the square mile; but of course this figure is practically an average, the population in the cities and larger towns being much more dense.

An inspection of the table will show that the growth in certain cities and towns is apparently quite large. Twenty-one cities and towns show a gain, in 1890 as compared with 1885, of more than 30 per cent. These are Dalton, Lenox, Fall River, Cottage City, Amesbury, Nahant, Monroe, Longmeadow, Everett, Malden, Melrose, Somerville, Brookline, Quincy, Brockton, Hull, Revere, Winthrop, Athol, Fitchburg, and Leominster. Of the preceding, the growth of the town of Amesbury is largely

due to the annexation of a considerable portion of the town of Salisbury, which also accounts for a corresponding decline in the last named town. The apparent growth in Lenox, Cottage City, Nahant, Hull, Revere, and Winthrop is partly due to the fact that the census was taken during June, the people being enumerated where they had their home in that month and not in the cities and towns where they had a legal residence, and all of these places being places of summer resort, reflect the increase due to summer residents. A similar explanation accounts for the growth in some of the other towns, particularly along the coast, which do not exhibit a rate of increase so great as the towns named. The growth of Everett, Malden, Melrose, Somerville, Brookline, and Quincy is due to the fact that each of these places has attracted a large number of people who make their residence there while doing business in the city of Boston. Everett, especially, shows a remarkable increase, its percentage of gain in 1890 as compared with 1880 being 166.12, a larger increase than that exhibited by any other city or town which has not been enlarged by annexation, the towns ranking next in the table being Hull, Revere, and Winthrop; but their gain is partly due, as explained above, to the fact that they are places of summer resort.

The following table exhibits the number of cities and towns showing an increase in population in 1890 as compared with 1885 and also the number of towns showing a decrease in population, by counties :

THE STATE, AND COUNTIES.	Whole Number of Cities and Towns in 1890	Number of Cities and Towns showing an Increase in Population in 1890 as compared with 1885	Number of Towns showing a Decrease in Population in 1890 as compared with 1885
THE STATE.	351	214	137
Barnstable, . . . . .	15	5	10
Berkshire, . . . . .	32	12	20
Bristol, . . . . .	20	11	9
Dukes, . . . . .	6	2	4
Essex, . . . . .	35	28	7
Franklin, . . . . .	26	10	16
Hampden, . . . . .	22	10	12
Hampshire, . . . . .	23	8	15
Middlesex, . . . . .	54	40	14
Nantucket, . . . . .	1	1	—
Norfolk, . . . . .	27	24	3
Plymouth, . . . . .	27	19	8
Suffolk, . . . . .	4	4	—
Worcester, . . . . .	59	40	19

It will be seen that, in the aggregate, 214 cities and towns show an increase in 1890 as compared with 1885, while 137 towns show a decrease. The towns showing a decrease had an aggregate population of 209,462 in 1885, while their population in 1890 is 187,125. The net loss, therefore, in these towns is 22,337, or 10.66 per cent of their population in 1885. The loss in the town of Attleborough in Bristol County, in the town of Salisbury in Essex County, and in the town of Milford in Worcester County is due to the loss of territory to other municipalities. The other towns which show a loss are mainly the small and remote agricultural towns. The towns of this class have suffered a loss for many years, the general tendency of the population being toward the larger cities and towns. In 1875, 142 towns showed a decline in population of 106,361, or 34.38 per cent, during the preceding ten years. This, of course, would be at the rate of 17.19 per cent for five years. In 1885, 153 towns showed a loss of 34,675, or 13.10 per cent of their population in 1875, or at the rate of 6.55 per cent for five years. It appears, therefore, that a smaller number of towns now show a loss in population than was the case either in 1875 or in 1885; and that the percentage rate of loss since 1885, while considerably less than for the decennial period closing in 1875, is somewhat greater than for the decennial period closing in 1885.

Of the towns showing loss the following also showed loss in 1885 as compared with 1875. Nine in Barnstable County: Barnstable, Chatham, Dennis, Eastham, Harwich, Sandwich, Truro, Wellfleet, and Yarmouth; 17 in Berkshire County: Alford, Cheshire, Florida, Hancock, Lanesborough, Monterey, Mount Washington, New Marlborough, Otis, Peru, Richmond, Sandisfield, Savoy, Sheffield, Tyringham, Washington, and West Stockbridge; three in Bristol County: Raynham, Rehoboth, and Westport; three in Dukes County: Chilmark, Edgartown, and Gay Head; two in Essex County: Topsfield and West Newbury; 11 in Franklin County: Ashfield, Bernardston, Buckland, Deerfield, Hawley, Leverett, Leyden, Rowe, Shutesbury, Sunderland, and Warwick; nine in Hampden County: Blandford, Brimfield, Chester, Granville, Holland, Montgomery, Southwick, Tolland, and Wales; 15 in Hampshire

County: Belchertown, Chesterfield, Cummington, Enfield, Goshen, Greenwich, Hadley, Hatfield, Middlefield, Pelham, Plainfield, Prescott, Southhampton, Westhampton, and Worthington; eight in Middlesex County: Ashby, Carlisle, Dunstable, Holliston, North Reading, Shirley, Stow, and Townsend; six in Plymouth County: Carver, Duxbury, Lakeville, Mattapoisett, Plympton, and Scituate; 14 in Worcester County: Berlin, Bolton, Boylston, Harvard, Mendon, Milford, Oakham, Paxton, Phillipston, Princeton, Royalston, Shrewsbury, Sterling, and West Brookfield. The loss in Milford during the last five years is due to the setting off of a portion of its territory as Hopedale, as previously explained, otherwise the town would have shown a gain.

The following towns, which showed a loss in 1885 as compared with 1875, show a gain in 1890 as compared with 1885. Brewster in Barnstable County; Lynnfield, Marblehead, Middleton, Nahant, Rockport, and Wenham in Essex County; Charlemont, Colrain, Monroe, and New Salem in Franklin County; Granby in Hampshire County; Burlington, Chelmsford, Hopkinton, Sudbury, and Tyngsborough in Middlesex County; Nantucket in Nantucket County; Bellingham, Braintree, Foxborough, Norfolk, Randolph, and Sharon in Norfolk County; Bridgewater, Halifax, Hanson, Hingham, Marshfield, Norwell, Pembroke, and West Bridgewater in Plymouth County; Ashburnham, Barre, Charlton, Dana, Hubbardston, Lunenburg, New Braintree, Northbridge, Oxford, Petersham, Rutland, Sturbridge, Templeton, Uxbridge, Westborough, and Westminster in Worcester County. Besides the above, the towns of Adams, Wilbraham, Belmont, Medway, and Needham, which showed a loss in 1885 as compared with 1875, due to the loss of territory to other towns, now show a gain in 1890 as compared with 1885.

The different rates of growth exhibited by the cities and towns, during the last ten years, have, of course, affected the Congressional districts, which were based upon the population of 1880, and which were practically uniform in size at the time of their formation. For the purpose of comparing the growth in these districts, the following table has been prepared:



CONGRESSIONAL DISTRICTS.	POPULATION	
	U. S. Census 1880	U. S. Census 1890
District No. 1, . . . . .	148,140	185,060
District No. 2, . . . . .	149,059	184,627
District No. 3, . . . . .	149,970	212,148
District No. 4, . . . . .	148,726	166,039
District No. 5, . . . . .	148,175	197,220
District No. 6, . . . . .	148,755	213,912
District No. 7, . . . . .	148,399	177,165
District No. 8, . . . . .	149,883	178,566
District No. 9, . . . . .	147,288	178,980
District No. 10, . . . . .	148,449	180,105
District No. 11, . . . . .	147,517	185,934
District No. 12, . . . . .	148,724	179,187
TOTALS, . . . . .	1,783,085	2,238,943

- It will be seen that the population of each district in 1880 was approximately 148,590, varying from 147,288 in district nine to 149,970 in district three. In certain districts the growth has been entirely out of proportion to that in others. District three has risen from 149,970 to 212,148 and district six from 148,755 to 213,912, while district five has risen from 148,175 to 197,220. In district one the population has risen from 148,140 to 185,060, and in district 11 from 147,517 to 185,934. In district four the population has risen from 148,726 to 166,039. The gain in the remaining districts is quite uniform, the present population varying from 166,039 in district four to 213,912 in district six. If the Commonwealth is to be divided into thirteen Congressional districts, upon the basis of the present population, the average population for each district will be 172,226.

The population of the State in municipalities located within a radius of eight miles of the State House is shown in the following table, for 1885 and 1890, with the gain for each city and town :

CITIES AND TOWNS.	POPULATION		Gain
	1885	1890	
BOSTON,* . . . . .	390,393	448,477	58,084
CAMBRIDGE, . . . . .	59,658	70,028	10,370
CHELSEA, . . . . .	25,709	27,909	2,200
MALDEN, . . . . .	16,407	23,031	6,624
SOMERVILLE, . . . . .	29,971	40,152	10,181
Arlington, . . . . .	4,673	5,629	956
Belmont, . . . . .	1,639	2,098	459
Brookline,* . . . . .	9,196	12,103	2,907
Everett, . . . . .	5,825	11,068	5,243
Medford, . . . . .	9,042	11,079	2,037
Melrose, . . . . .	6,101	8,519	2,418
Revere, . . . . .	3,637	5,668	2,031
Watertown, . . . . .	6,238	7,073	835
Winchester, . . . . .	4,390	4,861	471
Winthrop, . . . . .	1,370	2,726	1,356
TOTALS, . . . . .	574,249	680,421	106,172

\* See "Notes," on pages 174, 175, *post*, for territorial changes, etc.

The table shows that 680,421 persons, or 30.39 per cent of the entire population of the State, resided in the suburbs or the city of Boston. In 1885, the persons residing in these cities and towns comprised 29.57 per cent of the entire population. The same cities and towns, in 1875, contained 29.08 per cent of the population. The gain in the five years subsequent to 1885 is 106,172, or 18.49 per cent of the population of the cities and towns in 1885. If the radius be extended to comprise the cities and towns within twelve miles of the State House, we have the results shown in the following table :

CITIES AND TOWNS.	POPULATION		Gain
	1885	1890	
BOSTON,* . . . . .	390,393	448,477	58,084
CAMBRIDGE, . . . . .	59,658	70,028	10,370
CHELSEA, . . . . .	25,709	27,909	2,200
LYNN, . . . . .	45,867	55,727	9,860
MALDEN, . . . . .	16,407	23,031	6,624
NEWTON, . . . . .	19,759	24,379	4,620
QUINCY,* . . . . .	12,145	16,723	4,578
SOMERVILLE, . . . . .	29,971	40,152	10,181
WALTHAM, . . . . .	14,609	18,707	4,098
WOBURN,* . . . . .	11,750	13,499	1,749
Arlington, . . . . .	4,673	5,629	956
Belmont, . . . . .	1,639	2,098	459
Braintree, . . . . .	4,040	4,848	808

\* See "Notes," on pages 174, 175, *post*, for territorial changes, etc.

CITIES AND TOWNS.	POPULATION		Gain
	1885	1890	
Brookline,* . . . . .	9,196	12,103	2,907
Dedham, . . . . .	6,641	7,123	482
Everett, . . . . .	5,825	11,068	5,243
Hull, . . . . .	451	989	538
Hyde Park, . . . . .	8,376	10,193	1,817
Lexington, . . . . .	2,718	3,197	479
Lynnfield, . . . . .	766	787	21
Medford, . . . . .	9,042	11,079	2,037
Melrose, . . . . .	6,101	8,519	2,418
Milton, . . . . .	3,555	4,278	723
Nahant, . . . . .	637	880	243
Needham, . . . . .	2,586	3,035	449
Reading, . . . . .	3,539	4,088	549
Revere, . . . . .	3,637	5,668	2,031
Saugus, . . . . .	2,855	3,673	818
Stoneham,* . . . . .	5,659	6,155	496
Swampscott, . . . . .	2,471	3,198	727
Wakefield,* . . . . .	6,060	6,982	922
Watertown, . . . . .	6,238	7,073	835
Wellesley, . . . . .	3,013	3,600	587
Winchester, . . . . .	4,390	4,861	471
Winthrop, . . . . .	1,370	2,726	1,356
TOTALS, . . . . .	731,746	872,482	140,736

\* See "Notes," on pages 174, 175, *post*, for territorial changes, etc.

The cities and towns within the twelve mile radius had, in 1885, a population of 731,746, or 37.68 per cent of the entire population of the State. The gain from 1885 to 1890 has been 140,736, and the present population of the cities and towns is 872,482, or 38.97 per cent of the entire population of the State. The percentage of gain in these cities and towns is 19.23.

We have noticed that the percentage of gain in the entire State for the same period is 15.28. It therefore appears that the rate of increase in the population of Boston and its suburbs is somewhat greater than the rate of increase in population for the State. In 1885, it was found that the rate of increase in the cities and towns within the twelve mile radius was 21.17 per cent, during the previous ten years, while the rate of increase for the State during the same period was 17.57 per cent.

Since 1885, five cities have been incorporated; namely, Chicopee, Marlborough, Pittsfield, Quincy, and Woburn. The population of these cities in 1885 and in 1890 is shown in the following table:

CITIES.	State Census 1885	U. S. Census 1890
Chicopee, . . . . .	11,516	14,050
Marlborough, . . . . .	10,941	13,805
Pittsfield, . . . . .	14,466	17,281
Quincy, . . . . .	12,145	16,723
Woburn, . . . . .	11,750	13,499
TOTALS, . . . . .	60,818	75,358

The results of the above table show that these places had a population of 60,818 in 1885 and 75,358 in 1890, a gain of 23.91 per cent. The Commonwealth now has 28 cities, the total population in cities being 1,372,300, a gain of 223,986 above the population in 1885, which was 1,148,314. This is a gain of 19.51 per cent. The following table presents details of the population for the cities in 1885 and 1890, the names of cities in *italics* being those incorporated since 1885 :

CITIES.	POPULATION		INCREASE	
	State Census 1885	U. S. Census 1890	Number	Percentages
Boston, . . . . .	390,393	448,477	58,084	14.88
Brockton, . . . . .	20,783	27,294	6,511	31.33
Cambridge, . . . . .	59,658	70,028	10,370	17.38
Chelsea, . . . . .	25,709	27,909	2,200	8.56
<i>Chicopee</i> , . . . . .	11,516	14,050	2,534	22.00
Fall River, . . . . .	56,870	74,398	17,528	30.82
Fitchburg, . . . . .	15,375	22,037	6,662	43.33
Gloucester, . . . . .	21,703	24,651	2,948	13.58
Haverhill, . . . . .	21,795	27,412	5,617	25.77
Holyoke, . . . . .	27,895	35,637	7,742	27.75
Lawrence, . . . . .	38,862	44,654	5,792	14.90
Lowell, . . . . .	64,107	77,696	13,589	21.20
Lynn, . . . . .	45,867	55,727	9,860	21.50
Malden, . . . . .	16,407	23,031	6,624	40.37
<i>Marlborough</i> , . . . . .	10,941	13,805	2,864	26.18
New Bedford, . . . . .	33,393	40,733	7,340	21.98
Newburyport, . . . . .	13,716	13,947	231	1.68
Newton, . . . . .	19,759	24,379	4,620	23.38
Northampton, . . . . .	12,896	14,990	2,094	16.24
<i>Pittsfield</i> , . . . . .	14,466	17,281	2,815	19.46
<i>Quincy</i> , . . . . .	12,145	16,723	4,578	37.69
Salem, . . . . .	28,090	30,801	2,711	9.65
Somerville, . . . . .	29,971	40,152	10,181	33.97
Springfield, . . . . .	37,575	44,179	6,604	17.58
Taunton, . . . . .	23,674	25,448	1,774	7.49
Waltham, . . . . .	14,609	18,707	4,098	28.05
<i>Woburn</i> , . . . . .	11,750	13,499	1,749	14.89
Worcester, . . . . .	68,389	84,655	16,266	23.78
TOTALS, . . . . .	1,148,314	1,372,300	223,986	19.51

From the percentages shown in the preceding table it will appear that the cities exhibit marked differences in the rate of growth during the five years. The city which made the largest percentage of growth is Fitchburg in Worcester County, the gain being 43.33 per cent. Next to this is the city of Malden, which shows a gain of 40.37 per cent. Other cities showing large percentages of gain are Quincy, 37.69 per cent; Somerville, 33.97 per cent; Brockton, 31.33 per cent; Fall River, 30.82 per cent; Waltham, 28.05 per cent; Holyoke, 27.75 per cent; Marlborough, 26.18 per cent; and Haverhill, 25.77 per cent. Each of these places exhibits a percentage of gain greater than the percentage of gain for the State. It must be remembered that for obvious reasons the percentage rate of growth naturally decreases as the city increases in size. This is clearly shown by two illustrations from the table. The city of Fitchburg, which we have noted as making the largest percentage of growth, gained numerically 6,662, its population in 1885 being 15,375, and the percentage of gain thus becomes 43.33; while the city of Boston gained 58,084, its population in 1885 being 390,393, so that, notwithstanding the large numerical increase the percentage of gain is but 14.88, considerably less than that shown in the city of Fitchburg.

The following table exhibits the ranking, upon the basis of population, of all the cities and towns in the Commonwealth:

CITIES AND TOWNS.	Counties	Population	Rank
BOSTON, . . . . .	Suffolk, . . . . .	448,477	1
WORCESTER, . . . . .	Worcester, . . . . .	84,655	2
LOWELL, . . . . .	Middlesex, . . . . .	77,696	3
FALL RIVER, . . . . .	Bristol, . . . . .	74,398	4
CAMBRIDGE, . . . . .	Middlesex, . . . . .	70,028	5
LYNN, . . . . .	Essex, . . . . .	55,727	6
LAWRENCE, . . . . .	Essex, . . . . .	44,654	7
SPRINGFIELD, . . . . .	Hampden, . . . . .	44,179	8
NEW BEDFORD, . . . . .	Bristol, . . . . .	40,733	9
SOMERVILLE, . . . . .	Middlesex, . . . . .	40,152	10
HOLYOKE, . . . . .	Hampden, . . . . .	35,637	11
SALEM, . . . . .	Essex, . . . . .	30,801	12
CHELSEA, . . . . .	Suffolk, . . . . .	27,909	13
HAVERHILL, . . . . .	Essex, . . . . .	27,412	14
BROCKTON, . . . . .	Plymouth, . . . . .	27,294	15
TAUNTON, . . . . .	Bristol, . . . . .	25,448	16

CITIES AND TOWNS.	Counties	Population	Rank
GLOUCESTER, . . . . .	Essex, . . . . .	24,651	17
NEWTON, . . . . .	Middlesex, . . . . .	24,379	18
MALDEN, . . . . .	Middlesex, . . . . .	23,031	19
FITCHBURG, . . . . .	Worcester, . . . . .	22,037	20
WALTHAM, . . . . .	Middlesex, . . . . .	18,707	21
PITTSFIELD, . . . . .	Berkshire, . . . . .	17,281	22
QUINCY, . . . . .	Norfolk, . . . . .	16,723	23
North Adams, . . . . .	Berkshire, . . . . .	16,074	24
NORTHAMPTON, . . . . .	Hampshire, . . . . .	14,990	25
CHICOPEE, . . . . .	Hampden, . . . . .	14,050	26
NEWBURYPORT, . . . . .	Essex, . . . . .	13,947	27
MARLBOROUGH, . . . . .	Middlesex, . . . . .	13,805	28
WOBURN, . . . . .	Middlesex, . . . . .	13,499	29
Brookline, . . . . .	Norfolk, . . . . .	12,103	30
Medford, . . . . .	Middlesex, . . . . .	11,079	31
Everett, . . . . .	Middlesex, . . . . .	11,068	32
Weymouth, . . . . .	Norfolk, . . . . .	10,866	33
Beverly, . . . . .	Essex, . . . . .	10,821	34
Clinton, . . . . .	Worcester, . . . . .	10,424	35
Hyde Park, . . . . .	Norfolk, . . . . .	10,193	36
Peabody, . . . . .	Essex, . . . . .	10,158	37
Westfield, . . . . .	Hampden, . . . . .	9,805	38
Amesbury, . . . . .	Essex, . . . . .	9,798	39
Framingham, . . . . .	Middlesex, . . . . .	9,239	40
Adams, . . . . .	Berkshire, . . . . .	9,213	41
Natick, . . . . .	Middlesex, . . . . .	9,118	42
Milford, . . . . .	Worcester, . . . . .	8,780	43
Spencer, . . . . .	Worcester, . . . . .	8,747	44
Melrose, . . . . .	Middlesex, . . . . .	8,519	45
Gardner, . . . . .	Worcester, . . . . .	8,424	46
Marblehead, . . . . .	Essex, . . . . .	8,202	47
Southbridge, . . . . .	Worcester, . . . . .	7,655	48
Attleborough, . . . . .	Bristol, . . . . .	7,577	49
Danvers, . . . . .	Essex, . . . . .	7,454	50
Ware, . . . . .	Hampshire, . . . . .	7,329	51
Plymouth, . . . . .	Plymouth, . . . . .	7,314	52
Leominster, . . . . .	Worcester, . . . . .	7,269	53
Dedham, . . . . .	Norfolk, . . . . .	7,123	54
Watertown, . . . . .	Middlesex, . . . . .	7,073	55
Webster, . . . . .	Worcester, . . . . .	7,031	56
Wakefield, . . . . .	Middlesex, . . . . .	6,982	57
North Attleborough, . . . . .	Bristol, . . . . .	6,727	58
Palmer, . . . . .	Hampden, . . . . .	6,520	59
Athol, . . . . .	Worcester, . . . . .	6,319	60
Montague, . . . . .	Franklin, . . . . .	6,296	61
Stoneham, . . . . .	Middlesex, . . . . .	6,155	62
Andover, . . . . .	Essex, . . . . .	6,142	63
Blackstone, . . . . .	Worcester, . . . . .	6,138	64
Middleborough, . . . . .	Plymouth, . . . . .	6,065	65
Revere, . . . . .	Suffolk, . . . . .	5,668	66
Arlington, . . . . .	Middlesex, . . . . .	5,629	67
Greenfield, . . . . .	Franklin, . . . . .	5,252	68
Rockland, . . . . .	Plymouth, . . . . .	5,213	69
Westborough, . . . . .	Worcester, . . . . .	5,195	70
West Springfield, . . . . .	Hampden, . . . . .	5,077	71
Grafton, . . . . .	Worcester, . . . . .	5,002	72

CITIES AND TOWNS.	Counties	Population	Rank
Winchester, . . . . .	Middlesex, . . . . .	4,861	73
Stoughton, . . . . .	Norfolk, . . . . .	4,852	74
Braintree, . . . . .	Norfolk, . . . . .	4,848	75
Franklin, . . . . .	Norfolk, . . . . .	4,831	76
Methuen, . . . . .	Essex, . . . . .	4,814	77
Warren, . . . . .	Worcester, . . . . .	4,681	78
Hudson, . . . . .	Middlesex, . . . . .	4,670	79
Provincetown, . . . . .	Barnstable, . . . . .	4,642	80
Great Barrington, . . . . .	Berkshire, . . . . .	4,612	81
Northbridge, . . . . .	Worcester, . . . . .	4,603	82
Orange, . . . . .	Franklin, . . . . .	4,568	83
Hingham, . . . . .	Plymouth, . . . . .	4,564	84
Canton, . . . . .	Norfolk, . . . . .	4,538	85
Amherst, . . . . .	Hampshire, . . . . .	4,512	86
Easton, . . . . .	Bristol, . . . . .	4,493	87
Whitman, . . . . .	Plymouth, . . . . .	4,441	88
Ipswich, . . . . .	Essex, . . . . .	4,439	89
Millbury, . . . . .	Worcester, . . . . .	4,428	90
Concord, . . . . .	Middlesex, . . . . .	4,427	91
Easthampton, . . . . .	Hampshire, . . . . .	4,395	92
Winchendon, . . . . .	Worcester, . . . . .	4,390	93
Milton, . . . . .	Norfolk, . . . . .	4,278	94
South Hadley, . . . . .	Hampshire, . . . . .	4,261	95
Abington, . . . . .	Plymouth, . . . . .	4,260	96
Bridgewater, . . . . .	Plymouth, . . . . .	4,249	97
Williamstown, . . . . .	Berkshire, . . . . .	4,221	98
Hopkinton,* . . . . .	Middlesex, . . . . .	4,088	99
Reading,* . . . . .	Middlesex, . . . . .	4,088	
Rockport, . . . . .	Essex, . . . . .	4,087	101
Barnstable, . . . . .	Barnstable, . . . . .	4,023	102
Randolph, . . . . .	Norfolk, . . . . .	3,946	103
North Brookfield, . . . . .	Worcester, . . . . .	3,871	104
Lee, . . . . .	Berkshire, . . . . .	3,785	105
North Andover, . . . . .	Essex, . . . . .	3,742	106
Norwood, . . . . .	Norfolk, . . . . .	3,733	107
Bradford, . . . . .	Essex, . . . . .	3,720	108
Saugus, . . . . .	Essex, . . . . .	3,673	109
Monson, . . . . .	Hampden, . . . . .	3,650	110
Wellesley, . . . . .	Norfolk, . . . . .	3,600	111
Wareham, . . . . .	Plymouth, . . . . .	3,451	112
Mansfield, . . . . .	Bristol, . . . . .	3,432	113
Uxbridge, . . . . .	Worcester, . . . . .	3,408	114
Brookfield, . . . . .	Worcester, . . . . .	3,352	115
Nantucket, . . . . .	Nantucket, . . . . .	3,268	116
Swampscott, . . . . .	Essex, . . . . .	3,198	117
Lexington, . . . . .	Middlesex, . . . . .	3,197	118
Sutton, . . . . .	Worcester, . . . . .	3,180	119
Pepperell, . . . . .	Middlesex, . . . . .	3,127	120
Dartmouth, . . . . .	Bristol, . . . . .	3,122	121
Leicester, . . . . .	Worcester, . . . . .	3,120	122
Needham, . . . . .	Norfolk, . . . . .	3,035	123
West Boylston, . . . . .	Worcester, . . . . .	3,019	124
Templeton, . . . . .	Worcester, . . . . .	2,999	125
Medway, . . . . .	Norfolk, . . . . .	2,985	126
Dudley, . . . . .	Worcester, . . . . .	2,944	127
Foxborough, . . . . .	Norfolk, . . . . .	2,933	128

\* Same population.

CITIES AND TOWNS.	Counties	Population	Rank
Hardwick, . . . . .	Worcester, . . . . .	2,922	129
Fairhaven, . . . . .	Bristol, . . . . .	2,919	130
East Bridgewater, . . . . .	Plymouth, . . . . .	2,911	131
Deerfield, . . . . .	Franklin, . . . . .	2,910	132
Dennis, . . . . .	Barnstable, . . . . .	2,899	133
Lenox, . . . . .	Berkshire, . . . . .	2,889	134
Dalton, . . . . .	Berkshire, . . . . .	2,885	135
Harwich, . . . . .	Barnstable, . . . . .	2,734	136
Winthrop, . . . . .	Suffolk, . . . . .	2,726	137
Maynard, . . . . .	Middlesex, . . . . .	2,700	138
Chelmsford, . . . . .	Middlesex, . . . . .	2,695	139
Merrimac, . . . . .	Essex, . . . . .	2,633	140
Holden, . . . . .	Worcester, . . . . .	2,623	141
Holliston, . . . . .	Middlesex, . . . . .	2,619	142
Oxford, . . . . .	Worcester, . . . . .	2,616	143
Walpole, . . . . .	Norfolk, . . . . .	2,604	144
Westport, . . . . .	Bristol, . . . . .	2,599	145
Falmouth, . . . . .	Barnstable, . . . . .	2,567	146
Wrentham, . . . . .	Norfolk, . . . . .	2,566	147
Ashland, . . . . .	Middlesex, . . . . .	2,532	148
Tewksbury, . . . . .	Middlesex, . . . . .	2,515	149
Holbrook, . . . . .	Norfolk, . . . . .	2,474	150
Cohasset, . . . . .	Norfolk, . . . . .	2,448	151
Billerica, . . . . .	Middlesex, . . . . .	2,380	152
Agawam, . . . . .	Hampden, . . . . .	2,352	153
Scituate, . . . . .	Plymouth, . . . . .	2,318	154
Westford, . . . . .	Middlesex, . . . . .	2,250	155
Barre, . . . . .	Worcester, . . . . .	2,239	156
Lancaster, . . . . .	Worcester, . . . . .	2,201	157
Groveland, . . . . .	Essex, . . . . .	2,191	158
Longmeadow, . . . . .	Hampden, . . . . .	2,183	159
Ayer, . . . . .	Middlesex, . . . . .	2,148	160
Stockbridge, . . . . .	Berkshire, . . . . .	2,132	161
Belchertown, . . . . .	Hampshire, . . . . .	2,120	162
Georgetown, . . . . .	Essex, . . . . .	2,117	163
Southborough, . . . . .	Worcester, . . . . .	2,114	164
Somerset, . . . . .	Bristol, . . . . .	2,106	165
Belmont, . . . . .	Middlesex, . . . . .	2,098	166
Hanover, . . . . .	Plymouth, . . . . .	2,093	167
Ashburnham,* . . . . .	Worcester, . . . . .	2,074 }	168
Sturbridge,* . . . . .	Worcester, . . . . .	2,074 }	
Wayland, . . . . .	Middlesex, . . . . .	2,060	170
Williamsburg,* . . . . .	Hampshire, . . . . .	2,057 }	171
Groton,* . . . . .	Middlesex, . . . . .	2,057 }	
Dracont, . . . . .	Middlesex, . . . . .	1,996	173
Sheffield,* . . . . .	Berkshire, . . . . .	1,954 }	174
Chatham,* . . . . .	Barnstable, . . . . .	1,954 }	
Northborough, . . . . .	Worcester, . . . . .	1,952	176
Ludlow, . . . . .	Hampden, . . . . .	1,939	177
West Bridgewater, . . . . .	Plymouth, . . . . .	1,917	178
Douglas,* . . . . .	Worcester, . . . . .	1,908 }	179
Duxbury,* . . . . .	Plymouth, . . . . .	1,908 }	
Acton, . . . . .	Middlesex, . . . . .	1,897	181
Dighton, . . . . .	Bristol, . . . . .	1,889	182
Upton, . . . . .	Worcester, . . . . .	1,878	183
Northfield, . . . . .	Franklin, . . . . .	1,869	184

\* Same population.



CITIES AND TOWNS.	Counties	Population	Rank
Charlton, . . . . .	Worcester, . . . . .	1,847	185
Sandwich, . . . . .	Barnstable, . . . . .	1,819	186
Wilbraham, . . . . .	Hampden, . . . . .	1,814	187
West Newbury, . . . . .	Essex, . . . . .	1,796	188
Manchester, . . . . .	Essex, . . . . .	1,789	189
Rehoboth, . . . . .	Bristol, . . . . .	1,786	190
Norton, . . . . .	Bristol, . . . . .	1,785	191
Yarmouth, . . . . .	Barnstable, . . . . .	1,760	192
Townsend, . . . . .	Middlesex, . . . . .	1,750	193
Hinsdale, . . . . .	Berkshire, . . . . .	1,739	194
Essex,* . . . . .	Essex, . . . . .	1,713 }	195
Marshfield,* . . . . .	Plymouth, . . . . .	1,713 }	
Westminster, . . . . .	Worcester, . . . . .	1,688	197
Colrain, . . . . .	Franklin, . . . . .	1,671	198
Hadley, . . . . .	Hampshire, . . . . .	1,669	199
Weston, . . . . .	Middlesex, . . . . .	1,664	200
Kingston, . . . . .	Plymouth, . . . . .	1,659	201
Norwell, . . . . .	Plymouth, . . . . .	1,635	202
Sharon, . . . . .	Norfolk, . . . . .	1,634	203
West Brookfield, . . . . .	Worcester, . . . . .	1,592	204
Buckland, . . . . .	Franklin, . . . . .	1,570	205
Shelburne, . . . . .	Franklin, . . . . .	1,553	206
Auburn, . . . . .	Worcester, . . . . .	1,532	207
Tisbury, . . . . .	Dukes, . . . . .	1,506	208
Medfield, . . . . .	Norfolk, . . . . .	1,493	209
West Stockbridge, . . . . .	Berkshire, . . . . .	1,492	210
Swansea, . . . . .	Bristol, . . . . .	1,456	211
Conway, . . . . .	Franklin, . . . . .	1,451	212
Shrewsbury, . . . . .	Worcester, . . . . .	1,449	213
Bourne, . . . . .	Barnstable, . . . . .	1,442	214
Newbury, . . . . .	Essex, . . . . .	1,427	215
Freetown, . . . . .	Bristol, . . . . .	1,417	216
Huntington, . . . . .	Hampshire, . . . . .	1,385	217
Avon, . . . . .	Norfolk, . . . . .	1,384	218
Sherborn, . . . . .	Middlesex, . . . . .	1,381	219
Hubbardston, . . . . .	Worcester, . . . . .	1,346	220
Raynham, . . . . .	Bristol, . . . . .	1,340	221
Bellingham, . . . . .	Norfolk, . . . . .	1,334	222
Pembroke, . . . . .	Plymouth, . . . . .	1,320	223
Seekonk, . . . . .	Bristol, . . . . .	1,317	224
Salisbury, . . . . .	Essex, . . . . .	1,316	225
Cheshire, . . . . .	Berkshire, . . . . .	1,308	226
New Marlborough, . . . . .	Berkshire, . . . . .	1,305	227
Chester, . . . . .	Hampden, . . . . .	1,295	228
Wellfleet, . . . . .	Barnstable, . . . . .	1,291	229
Hanson, . . . . .	Plymouth, . . . . .	1,267	230
Rowley, . . . . .	Essex, . . . . .	1,248	231
Hatfield, . . . . .	Hampshire, . . . . .	1,246	232
Sterling, . . . . .	Worcester, . . . . .	1,244	233
Orleans, . . . . .	Barnstable, . . . . .	1,219	234
Wilmington, . . . . .	Middlesex, . . . . .	1,213	235
Sudbury, . . . . .	Middlesex, . . . . .	1,197	236
Shirley, . . . . .	Middlesex, . . . . .	1,191	237
Hopedale, . . . . .	Worcester, . . . . .	1,176	238
Edgartown, . . . . .	Dukes, . . . . .	1,156	239
Mattapoisett, . . . . .	Plymouth, . . . . .	1,148	240

\* Same population.

CITIES AND TOWNS.	Counties	Population	Rank
Lunenburg, . . . . .	Worcester, . . . . .	1,146	241
Brimfield, . . . . .	Hampden, . . . . .	1,096	242
Harvard, . . . . .	Worcester, . . . . .	1,095	243
Bedford, . . . . .	Middlesex, . . . . .	1,092	244
Cottage City, . . . . .	Dukes, . . . . .	1,080	245
Granville, . . . . .	Hampden, . . . . .	1,061	246
Petersham, . . . . .	Worcester, . . . . .	1,050	247
Royalston, . . . . .	Worcester, . . . . .	1,030	248
Acushnet, . . . . .	Bristol, . . . . .	1,027	249
Ashfield,* . . . . .	Franklin, . . . . .	1,025 }	250
Littleton,* . . . . .	Middlesex, . . . . .	1,025 }	
Topsfield, . . . . .	Essex, . . . . .	1,022	252
Lanesborough, . . . . .	Berkshire, . . . . .	1,018	253
Southampton, . . . . .	Hampshire, . . . . .	1,017	254
Rochester, . . . . .	Plymouth, . . . . .	1,012	255
Brewster, . . . . .	Barnstable, . . . . .	1,003	256
Carver, . . . . .	Plymouth, . . . . .	994	257
Hull, . . . . .	Plymouth, . . . . .	989	258
Lincoln, . . . . .	Middlesex, . . . . .	987	259
Princeton, . . . . .	Worcester, . . . . .	982	260
Rutland, . . . . .	Worcester, . . . . .	980	261
Charlemont,* . . . . .	Franklin, . . . . .	972 }	262
Erving,* . . . . .	Franklin, . . . . .	972 }	
Hamilton, . . . . .	Essex, . . . . .	961	264
Gill, . . . . .	Franklin, . . . . .	960	265
Enfield, . . . . .	Hampshire, . . . . .	952	266
Becket, . . . . .	Berkshire, . . . . .	946	267
Lakeville, . . . . .	Plymouth, . . . . .	935	268
Middletown, . . . . .	Essex, . . . . .	924	269
Truro,* . . . . .	Barnstable, . . . . .	919 }	270
Mendon,* . . . . .	Worcester, . . . . .	919 }	
Southwick, . . . . .	Hampden, . . . . .	914	272
Norfolk, . . . . .	Norfolk, . . . . .	913	273
Stow, . . . . .	Middlesex, . . . . .	903	274
Berkley, . . . . .	Bristol, . . . . .	894	275
Wenham, . . . . .	Essex, . . . . .	886	276
Berlin,* . . . . .	Worcester, . . . . .	884 }	277
Clarksburg,* . . . . .	Berkshire, . . . . .	884 }	
Nahant, . . . . .	Essex, . . . . .	880	279
Russell, . . . . .	Hampden, . . . . .	879	280
North Reading, . . . . .	Middlesex, . . . . .	874	281
Marion,* . . . . .	Plymouth, . . . . .	871 }	282
Blandford,* . . . . .	Hampden, . . . . .	871 }	
Boxford, . . . . .	Essex, . . . . .	865	284
New Salem, . . . . .	Franklin, . . . . .	856	285
Egremont, . . . . .	Berkshire, . . . . .	845	286
Hampden, . . . . .	Hampden, . . . . .	831	287
Bolton, . . . . .	Worcester, . . . . .	827	288
Ashby, . . . . .	Middlesex, . . . . .	825	289
Sandisfield, . . . . .	Berkshire, . . . . .	807	290
Richmond, . . . . .	Berkshire, . . . . .	796	291
Cummington,* . . . . .	Hampshire, . . . . .	787 }	292
Lynnfield,* . . . . .	Essex, . . . . .	787 }	
Millis, . . . . .	Norfolk, . . . . .	786	294
Whately, . . . . .	Franklin, . . . . .	779	295
Bernardston,† . . . . .	Franklin, . . . . .	770	296

\* Same population.

† Same population as Boylston. See page 152.

CITIES AND TOWNS.	Counties	Population	Rank
Boylston,* . . . . .	Worcester, . . . . .	770	296
Granby, . . . . .	Hampshire, . . . . .	765	298
Oakham, . . . . .	Worcester, . . . . .	738	299
Dover, . . . . .	Norfolk, . . . . .	727	300
Worthington, . . . . .	Hampshire, . . . . .	714	301
Leverett, . . . . .	Franklin, . . . . .	702	302
Wales,† . . . . .	Hampden, . . . . .	700	303
Dana,† . . . . .	Worcester, . . . . .	700	
Sunderland, . . . . .	Franklin, . . . . .	663	305
Tyngsborough, . . . . .	Middlesex, . . . . .	662	306
Burlington, . . . . .	Middlesex, . . . . .	617	307
Windsor, . . . . .	Berkshire, . . . . .	612	308
Chesterfield, . . . . .	Hampshire, . . . . .	608	309
Eastham, . . . . .	Barnstable, . . . . .	602	310
Plympton, . . . . .	Plymouth, . . . . .	597	311
Otis, . . . . .	Berkshire, . . . . .	583	312
New Braintree, . . . . .	Worcester, . . . . .	573	313
Savoy, . . . . .	Berkshire, . . . . .	569	314
Warwick, . . . . .	Franklin, . . . . .	565	315
Halifax, . . . . .	Plymouth, . . . . .	562	316
Rowe, . . . . .	Franklin, . . . . .	541	317
Greenwich, . . . . .	Hampshire, . . . . .	526	318
Hawley, . . . . .	Franklin, . . . . .	515	319
Hancock, . . . . .	Berkshire, . . . . .	506	320
Wendell, . . . . .	Franklin, . . . . .	505	321
Heath, . . . . .	Franklin, . . . . .	503	322
Phillipston, . . . . .	Worcester, . . . . .	502	323
Monterey, . . . . .	Berkshire, . . . . .	495	324
Pelham, . . . . .	Hampshire, . . . . .	486	325
Carlisle, . . . . .	Middlesex, . . . . .	481	326
Westhampton, . . . . .	Hampshire, . . . . .	477	327
Middlefield, . . . . .	Hampshire, . . . . .	455	328
Shutesbury, . . . . .	Franklin, . . . . .	453	329
Paxton, . . . . .	Worcester, . . . . .	445	330
Florida, . . . . .	Berkshire, . . . . .	436	331
Plainfield, . . . . .	Hampshire, . . . . .	435	332
Washington, . . . . .	Berkshire, . . . . .	434	333
Dunstable, . . . . .	Middlesex, . . . . .	416	334
Tyringham, . . . . .	Berkshire, . . . . .	412	335
Leyden, . . . . .	Franklin, . . . . .	407	336
Tolland, . . . . .	Hampden, . . . . .	393	337
Prescott, . . . . .	Hampshire, . . . . .	376	338
Chilmark, . . . . .	Dukes, . . . . .	353	339
Boxborough, . . . . .	Middlesex, . . . . .	325	340
Peru, . . . . .	Berkshire, . . . . .	305	341
Mashpee, . . . . .	Barnstable, . . . . .	298	342
Alford,† . . . . .	Berkshire, . . . . .	297	343
Goshen,† . . . . .	Hampshire, . . . . .	297	
Monroe, . . . . .	Franklin, . . . . .	282	345
Montgomery, . . . . .	Hampden, . . . . .	266	346
Holland, . . . . .	Hampden, . . . . .	201	347
Mount Washington, . . . . .	Berkshire, . . . . .	148	348
Gay Head, . . . . .	Dukes, . . . . .	139	349
Gosnold, . . . . .	Dukes, . . . . .	135	350
New Ashford, . . . . .	Berkshire, . . . . .	125	351

\* Same population as Bernardston. See page 151.

† Same population.

Analyzing the preceding table we find that the first 23 cities rank in numerical order, the city of Boston, of course, standing at the head, and the city of Quincy ranking 23. Next to the city of Quincy, ranking 24 in the table, is the town of North Adams with a population of 16,074, considerably more than required to secure a city charter, but which has not abandoned town government. North Adams now ranks first among our towns, it being the largest town in the State. In 1885, it ranked three in the list of towns and 26 among the cities and towns, its population being 12,540. The town, therefore, shows a gain of 3,534, or 28.18 per cent since 1885. Next to the town of North Adams ranks the city of Northampton, followed by the cities of Chicopee, Newburyport, Marlborough, and Woburn. Woburn, the smallest city, the population being 13,499, ranks 29 among the cities and towns, and is followed by the town of Brookline, having a population of 12,103. Brookline, like North Adams, passes the limit required to become a city, but still remains a town. In 1885, Brookline ranked 11 among the towns and 34 among the cities and towns. It now stands second among the towns and 30 among the cities and towns. Its population in 1885 was 9,196. Its gain is 2,907, or 31.61 per cent. Next to Brookline come the towns of Medford, Everett, Weymouth, Beverly, Clinton, Hyde Park, and Peabody. Each of these towns has passed the limit of 10,000, and, from the rate of gain at present exhibited, seems likely soon to acquire the minimum population fixed for the cities. In 1885, Pittsfield ranked first among the Massachusetts towns, but has since become a city. Attleborough ranked second, but has lost part of its population by being divided, June 14, 1887. Quincy, Woburn, Chicopee, and Marlborough, which ranked four, five, six, and seven among the cities and towns in 1885, have each become cities. The town of Weymouth ranked eight among the towns in 1885 and now ranks five. Beverly then ranked 12 and now ranks six. Clinton then ranked 15 and now ranks seven. Hyde Park was then 17 and is now eight. Peabody was then nine and now retains the same rank. The difference between Peabody and Hyde Park is slight, the population of Hyde Park being 10,193 and of Peabody 10,158.

The smallest town in the State is New Ashford in Berkshire County, its population being 125 and its rank among the cities

and towns 351. Gosnold, in Dukes County, which in 1885 contained 122 persons, then ranked as the smallest town in the State and at that time New Ashford ranked next but one above it. Gosnold has made a gain of 13 persons in five years and now contains 135, ranking next to New Ashford. Next above Gosnold stands Gay Head in the same county, having 139 persons and ranking 349 among the cities and towns. This town shows a loss since 1885, as it then contained 186 persons, its rank being 344. Next to Gay Head comes Mount Washington in Berkshire County, which now ranks 348. In 1885, its rank was 347; its population at that time was 160, and it now has 148, showing a loss during the five years; but its rank among the cities and towns is somewhat better than it was then. The four towns, Mount Washington, Gay Head, Gosnold, and New Ashford, have each a population less than 200, while the towns of Mashpee, Alford, Goshen, Monroe, Montgomery, and Holland have each a population between 200 and 300.

The following table presents a summary showing the number of cities and towns, within a certain range of population, the total population, and average population presented by each range, and percentages for each range of the whole number of towns and of the total population:

RANGE OF POPULATION.	Number of Cities and Towns	Total Population	Average Population	PERCENTAGES—	
				of Towns	of Population
BOSTON, . . . . .	1	448,477	448,477	0.28	20.03
80,000 to 90,000, . . . . .	1	81,655	81,655	0.28	3.78
70,000 to 80,000, . . . . .	3	222,122	74,041	0.86	9.92
60,000 to 70,000, . . . . .	—	—	—	—	—
50,000 to 60,000, . . . . .	1	55,727	55,727	0.28	2.49
40,000 to 50,000, . . . . .	4	169,718	42,430	1.14	7.58
30,000 to 40,000, . . . . .	2	66,438	33,219	0.57	2.97
20,000 to 30,000, . . . . .	8	202,161	25,270	2.28	9.03
15,000 to 20,000, . . . . .	4	68,785	17,196	1.14	3.07
10,000 to 15,000, . . . . .	13	157,003	12,077	3.70	7.01
5,000 to 10,000, . . . . .	35	250,050	7,144	9.97	11.17
3,000 to 5,000, . . . . .	52	209,793	4,034	14.82	9.37
2,500 to 3,000, . . . . .	25	68,925	2,757	7.12	3.08
2,000 to 2,500, . . . . .	23	50,286	2,186	6.55	2.24
1,500 to 2,000, . . . . .	86	63,745	1,771	10.26	2.85
1,000 to 1,500, . . . . .	48	59,053	1,230	13.68	2.64
500 to 1,000, . . . . .	67	52,233	780	19.09	2.33
Under 500, . . . . .	28	9,772	349	7.98	0.44
TOTALS, . . . . .	351	2,238,943	6,379	100.00	100.00

From the preceding table we find that the city of Boston, containing a population of 448,477, represents 0.28 per cent of the whole number of cities and towns and contains 20.03 per cent of the entire population of the State. In this respect it remains about the same as in 1885 when it contained 20.10 per cent of the whole population. Outside of the city of Boston we find no city containing more than 90,000 persons. In the class ranging from 80,000 to 90,000 we find one city, Worcester, having a population of 84,655, or 3.78 per cent of the entire population of the State. In the class ranging from 70,000 to 80,000 there are three cities, the total population being 222,122, or 9.92 per cent of the entire population. There are no cities in which the population ranges from 60,000 to 70,000. In the class ranging from 50,000 to 60,000 there is one city, its population being 55,727, or 2.49 per cent of the entire population of the State. In the class ranging from 40,000 to 50,000 there are four cities, the total population being 169,718, or 7.58 per cent of the entire population of the State. In the class ranging from 30,000 to 40,000 are found two cities, the total population being 66,438, or 2.97 per cent of the entire population of the State. In the class ranging from 20,000 to 30,000 eight cities are found, the total population being 202,161, or 9.03 per cent of the entire population of the State. In the class ranging from 15,000 to 20,000 are found four cities, containing 68,785 persons, or 3.07 per cent of the entire population of the State. In the class ranging from 10,000 to 15,000 are found five cities and eight towns, the total population being 157,003, or 7.01 per cent of the entire population of the State.

The classes to which we have so far referred, namely, those ranging from 10,000 to 90,000, together with the city of Boston, represent 10.53 per cent of the total number of cities and towns in the Commonwealth, but they contain 65.88 per cent of the entire population.

The towns ranging from 5,000 to 10,000 in population number 35, the total population being 250,050, or 11.17 per cent of the entire population of the State. The average population of these towns is 7,144 and they represent 9.97 per cent of the total number of cities and towns. In the class ranging from 3,000 to 5,000 are found 52 towns, containing

209,793 persons, or 9.37 per cent of the entire population of the State, while these towns represent 14.82 per cent of the total number of cities and towns. In the class ranging from 2,500 to 3,000 are found 25 towns, the total population being 68,925, or 3.08 per cent of the entire population of the State. These towns constitute 7.12 per cent of the total number of cities and towns. In the class ranging from 2,000 to 2,500 are 23 towns, the total population being 50,286, or 2.24 per cent of the entire population of the State. These towns constitute 6.55 per cent of the total number of cities and towns. In the class ranging from 1,500 to 2,000 are found 36 towns, containing a total population of 63,745, or 2.85 per cent of the entire population of the State. These towns constitute 10.26 per cent of the total number of cities and towns. In the class ranging from 1,000 to 1,500 are 48 towns, the total population being 59,053, or 2.64 per cent of the entire population of the State. These towns constitute 13.68 per cent of the total number of cities and towns. In the class ranging from 500 to 1,000 are found 67 towns, the total population being 52,233, or 2.33 per cent of the entire population of the State. These towns constitute 19.09 per cent of the total number of cities and towns. There are 28 towns in which the population is less than 500. These towns contain 9,772 persons. They constitute 7.98 per cent of the total number of cities and towns, while they contain 0.44 per cent of the entire population of the State.

The number of cities and towns on January 1, 1891 was 351, of which 28 were cities and 323 were towns. In 1885, there were 23 cities and 325 towns, making a total of 348 cities and towns. The newly incorporated cities have been mentioned. The new towns since 1885 are North Attleborough in Bristol County, set off from Attleborough, June 14, 1887; Avon in Norfolk County, which was set off from the town of Stoughton, February 21, 1888, and afterwards received accessions from the towns of Holbrook and Randolph; Hopedale in Worcester County, which was set off from the town of Milford, April 7, 1886. Three new towns have been incorporated and five towns as cities, making a net gain of three municipalities.

The average population of the cities and towns in the State, as shown by the foregoing table, is 6,379; but the misleading

nature of an average is also plainly apparent from this table, inasmuch as it appears that the population is concentrated in the larger cities and towns. In 35.32 per cent of the total number of cities and towns is found 86.42 per cent of the population; or, to express it differently, in slightly more than one-third of the cities and towns nearly nine-tenths of the population is found; and no one of these cities or towns has a population less than 3,000.

To enable calculations on population to be readily made for years between census periods, we have estimated the population for all the years between 1880 and 1890, excepting the year 1885 which was a census year. These estimates are presented in the following table :

YEARS.	Population	YEARS.	Population
1880, . . . . .	1,783,085	1886, . . . . .	2,001,501
1881, . . . . .	1,814,896	1887, . . . . .	2,060,861
1882, . . . . .	1,846,707	1888, . . . . .	2,120,221
1883, . . . . .	1,878,518	1889, . . . . .	2,179,581
1884, . . . . .	1,910,329	1890, . . . . .	2,238,943
1885, . . . . .	1,942,141		

We have also estimated the population for the ten years following the census of 1885, except for the year 1890, which is a census year, and these estimates are presented in the following table. It will be understood that the estimates are made on a purely mathematical basis.

YEARS.	Population	YEARS.	Population
1885, . . . . .	1,942,141	1891, . . . . .	2,307,374
1886, . . . . .	2,001,501	1892, . . . . .	2,375,805
1887, . . . . .	2,060,861	1893, . . . . .	2,444,236
1888, . . . . .	2,120,221	1894, . . . . .	2,512,667
1889, . . . . .	2,179,581	1895, . . . . .	2,581,098
1890, . . . . .	2,238,943		

For the purpose of showing the percentages of increase or decrease in the population of the State and counties at different census periods, the following table is presented. A loss in population is indicated by the sign [—].



CENSUS PERIODS.		PERCENTAGES OF INCREASE OR DECREASE IN POPULATION					
		COUNTIES					
		Barnstable	Berkshire	Bristol	Dukes	Essex	Franklin
1	1765-1776*, (Provincial) . . .	28.19	107.78	25.35	20.29	17.00	194.57
2	1776 1790†, (U. S.) . . .	11.63	63.30	18.76	15.70	13.73	111.2
3	1790-1800, (U. S.) . . .	11.17	11.44	6.84	-4.19	5.66	20.56
4	1800-1810, (U. S.) . . .	15.12	6.23	9.70	5.51	17.47	4.36
5	1810-1820, (U. S.) . . .	8.17	-0.60	10.06	-	3.84	7.25
6	1820-1830, (U. S.) . . .	18.67	6.31	21.22	6.83	10.93	6.72
7	1830-1840, (U. S.) . . .	14.14	10.71	21.31	12.53	14.63	-2.73
8	1840-1850, (U. S.) . . .	8.38	18.79	26.64	14.70	38.22	7.22
9	1850-1860, (U. S.) . . .	2.02	11.15	23.10	-3.02	26.13	1.80
10	1855-1865, (State) . . .	-2.34	7.87	2.25	-4.52	13.25	-6.99
11	1860-1870, (U. S.) . . .	-8.94	17.61	9.69	-13.99	21.27	3.82
12	1865-1875, (State) . . .	-7.13	19.89	46.64	-3.07	30.58	7.22
13	1870-1880, (U. S.) . . .	-2.68	6.40	35.14	13.55	21.75	10.31
14	1875-1885, (State) . . .	-7.15	8.14	20.91	1.57	18.08	11.14
15	1880-1890, (U. S.) . . .	-8.54	17.49	34.11	1.63	22.63	7.25
16	1765-1890,† . . .	140.55	838.75	775.38	86.23	539.26	640.15

\* 11 years.

† 14 years.

‡ 125 years.

The above table shows the percentages for the Provincial Censuses of 1765 and 1776, the Federal Censuses from 1790 to 1890 inclusive, and the State Censuses from 1855 to 1885 inclusive. It also shows the percentages of gain for the State and for each county by census periods since 1765, and the percentage of gain for 125 years, or from 1765 to 1890. From this table we find that the largest percentage of gain for the entire State during any one period was 34.81, from 1840 to 1850, the next largest being for the period from 1865 to 1875, when the gain was 30.38 per cent. The gain from 1776 to 1790 was 28.37 per cent. The gain from 1880 to 1890, the last decennial period, 25.57 per cent, is larger than the gain for any census-period except the three just noted. The percentages of gain for the counties and for the State for 125 years, or from 1765 to 1890, the entire period covered by the table, varied from 2,933.29 per cent for Suffolk County to 86.23 per cent for Dukes County, the percentage of gain for the State being 839.96. The county of Nantucket shows a loss, with a net decrease in population for 125 years of 1.57 per cent. This

PERCENTAGES OF INCREASE OR DECREASE IN POPULATION								
COUNTIES								THE STATE
Hampden	Hampshire	Middlesex	Nantucket	Norfolk	Plymouth	Suffolk	Worcester	
59.79	89.05	14.97	32.89	25.12	12.94	—79.03	41.46	*23.88
44.50	54.87	6.52	4.71	7.93	9.02	485.79	22.33	†28.37
22.24	21.53	9.80	21.58	13.97	1.77	37.21	7.72	11.63
4.09	7.28	12.48	21.18	14.80	9.18	33.33	6.07	11.63
14.74	7.87	16.44	6.74	16.72	8.43	27.80	13.42	10.85
12.91	14.29	26.80	—0.88	15.08	12.86	41.47	14.57	16.64
18.10	2.12	36.74	25.13	26.60	10.05	54.06	12.99	20.85
37.24	15.65	51.37	—6.21	48.46	17.57	50.89	37.22	34.81
11.80	5.85	34.06	27.89	39.37	16.29	33.34	22.07	23.79
17.72	10.66	13.58	—41.12	23.25	2.62	21.17	8.96	11.89
36.68	17.36	26.81	—32.34	—18.05	0.92	40.53	20.70	18.38
46.05	14.11	28.92	—32.68	—24.06	9.91	75.25	29.98	30.38
32.82	6.41	15.65	—9.61	7.90	13.24	43.23	17.74	22.35
23.82	8.15	25.76	—1.84	15.65	17.76	15.41	16.05	17.57
30.82	9.80	35.66	—12.32	23.26	25.24	24.97	23.75	25.57
1,533.72	706.64	1,135.58	—1.57	572.72	259.62	2,933.29	755.35	†839.96
* 11 years.                      † 14 years.                      ‡ 125 years.								

county and also the county of Barnstable shows a decrease in population at every census period since 1855. Dukes County shows a loss in the census periods ending with 1800 and 1860, and subsequently down to 1875. Since then it has shown a gain. Norfolk County showed a loss in the census periods ending with 1870 and 1875, but has since shown a gain. Every other county has shown a gain at every census period, except the county of Berkshire, which showed a trifling loss in the period ending with 1820, the county of Franklin, which showed small losses in the periods ending with 1840 and 1865, and the county of Suffolk, which showed a loss in the period ending with 1776. The counties which have shown the largest gains during the 125 years are Suffolk, Hampden, and Middlesex.

For the purpose of showing the growth of the city of Boston since its settlement we present the following table, which originally appeared in part in the work published in 1882 entitled "Social, Commercial, and Manufacturing Statistics of the City of Boston," by Carroll D. Wright, at that time Chief of the Massachusetts Bureau of Statistics of Labor. The table has been revised and brought up to date.

	CENSUS YEARS.	Census taken by —	Boston, including Annexations	a Boston proper: Set- tled, 1630; Made a City, 1822.	Annexed Territory
1	1638, . . . . .	- - -	-	b 150	-
2	1675, . . . . .	- - -	-	b 4,000	-
3	1698, . . . . .	- - -	-	b 7,000	-
4	1704, . . . . .	- - -	-	b 6,750	-
5	1720, . . . . .	- - -	-	b 11,000	-
6	1722, . . . . .	Town, . . . .	-	10,567	-
7	1742, . . . . .	Town, . . . .	-	16,382	-
8	1752, . . . . .	Town, . . . .	-	15,731	-
9	1765, . . . . .	Province, . . .	-	15,520	-
10	1775, . . . . .	Gen. Gage, . .	-	6,573	-
11	1776, . . . . .	Province, . . .	-	2,719	-
12	1781, . . . . .	Province, . . .	-	c 10,000	-
13	1784, . . . . .	Province, . . .	-	c 15,870	-
14	1789, . . . . .	Town, . . . .	-	d 17,880	-
15	1790, . . . . .	U. S., . . . .	18,320	18,038	262
16	1800, . . . . .	U. S., . . . .	24,937	24,655	282
17	1810, . . . . .	U. S., . . . .	33,787	32,896	891
18	1820, . . . . .	U. S., . . . .	43,298	-	-
19	1825, . . . . .	City, . . . .	58,277	56,003	2,274
20	1830, . . . . .	U. S., . . . .	61,392	-	-
21	1835, . . . . .	City, . . . .	78,603	72,057	6,546
22	1840, . . . . .	U. S., . . . .	e 63,383	85,475	7,900
23	1845, . . . . .	City, . . . .	114,366	99,036	15,330
24	1850, . . . . .	U. S., . . . .	136,881	113,721	23,160
25	1855, . . . . .	State, . . . .	160,490	126,296	34,194
26	1860, . . . . .	U. S., . . . .	177,840	133,563	44,277
27	1865, . . . . .	State, . . . .	192,318	141,083	51,235
28	1870, . . . . .	U. S., . . . .	250,526	138,781	111,745
29	1875, . . . . .	State, . . . .	341,919	140,669	201,250
30	1880, . . . . .	U. S., . . . .	362,839	147,075	215,764
31	1885, . . . . .	State, . . . .	390,393	147,138	243,255
32	1890, . . . . .	U. S., . . . .	448,477	161,330	287,147

a By Boston proper is meant the territory of Boston, independent of all annexations.

b Estimates made in the years named. Those for 1675 and 1698 were probably too large.

c Estimates based on censuses of polls.

d Estimate based on actual number of houses in 1789, and the average persons to a house, as shown by the U. S. census of 1790.

e By the State census of May, 1840, the population of Boston was 84,401. Mr. Shattuck, in his report on the census of Boston for 1845, shows clearly that the U. S. census of 1840 was incorrect.

k The population, as usually given in census tables, includes that of the islands in the harbor.

f Estimated.

g Included also in the population of Dorchester in this year. After 1855, Washington Village is included in South Boston.

ANNEXATIONS									
East Boston (1836)	The Islands (See Notes)	South Boston (1804)	Washington Village (1855)	Roxbury (1867)	Dorchester (1869)	West Roxbury (1873)	Brighton (1873)	Charlestown (1873)	
-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	3
-	-	-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	-	-	5
-	-	-	-	-	-	-	-	-	6
-	-	-	-	-	-	-	-	-	7
-	-	-	-	-	-	-	-	-	8
-	-	-	-	1,487	1,360	-	-	2,031	9
-	-	-	-	-	-	-	-	-	10
-	-	-	-	1,433	1,513	-	-	360	11
-	-	-	-	c 1,630	c 1,940	-	-	c 725	12
-	-	-	-	c 2,150	c 2,060	-	-	c 1,340	13
-	-	-	-	-	-	-	-	-	14
-	282	-	-	2,226	1,722	-	-	1,583	15
-	f 282	-	-	2,765	2,347	-	-	2,751	16
18	519	354	-	3,669	2,930	-	608	4,959	17
-	-	-	-	4,135	3,684	-	702	6,591	18
24	264	1,986	-	-	-	-	-	-	19
-	-	-	-	5,247	4,074	-	972	8,783	20
607	344	5,595	-	-	-	-	-	-	21
1,455	277	6,176	-	9,089	4,875	-	1,425	11,484	22
5,018	292	10,020	-	-	-	-	-	-	23
9,526	325	13,309	-	18,364	7,969	-	2,356	17,216	24
15,433	f 530	16,912	g 1,319	18,469	8,340	4,812	2,895	21,700	25
18,356	f 1,000	24,921	-	25,137	9,769	6,310	3,375	25,065	26
20,572	f 1,300	29,363	-	28,426	10,717	6,912	3,854	26,399	27
23,816	f 1,700	39,215	-	34,753	12,261	8,686	4,967	28,323	28
27,420	1,927	A 54,147	-	50,429	15,788	11,783	6,200	33,556	29
k 28,381	m 1,545	56,369	-	l 57,123	l 17,890	14,032	6,693	33,731	30
k 29,280	m 2,139	61,534	-	65,965	20,717	17,424	8,523	37,673	31
36,930	n -	66,791	-	78,411	29,638	24,997	12,032	38,348	32

A The population of South Boston could not be stated definitely for 1875, because the wards including South Boston also included a part of Boston proper. The figures given are very close, however.

f The territory of Roxbury and Dorchester was not kept intact by ward boundaries in the ward division of 1875; it is difficult, therefore, to give the exact population of each district by the census of 1880. The figures given are the result of very careful study of the population by census enumeration districts, of which there were 208 in Boston for the U. S. census of 1880.

m For the separate islands as follows: 1880—Breed's, 152; Deer, 851; Galloupe, 5; Rainsford, 187; Long, 49; Lovell, 5; Spectacle, 53; Thompson's, 106; Fort Independence, 13; Fort Warren, 112; Fort Winthrop, 12. 1885—Breed's, 348; Deer, 1,145; Galloupe, 6; Rainsford, 204; Long, 81; Lovell, 7; Spectacle, 61; Thompson's, 122; Fort Independence, 11; Fort Warren, 129; Fort Winthrop, 25.

n Included in East Boston.

The following analysis of the preceding table appears in the Decennial Census of Massachusetts, for 1885, Volume I.,—

“From this table, which is the result of research for periods commencing with 1638, it is seen that the growth of the population of the city of Boston has been steady, and, also, for all annexed districts which have been brought together to make what is now the metropolis of New England. It is an exceedingly interesting presentation, showing as it does for the various periods, in addition to the total population for Boston (including annexations), the population of Boston proper, the population of the annexed territory as a whole, and the population of the various annexed territories before and after annexation, together with the dates of annexation. With this table before us we can examine the movement of population by decades or half decades. Beginning with 1855, and taking the facts for each half decade since and including the year 1885, as we have had a quinquennial census since then either by the State or Federal Government, we find that the increase of population from 1855 to 1860 for the city of Boston as constituted at that time was 17,350; of this increase 7,267 was in the city proper, and 10,083 in the annexed districts of East Boston, South Boston, and the Islands. During this same period, the territory which was subsequently annexed, but which did not form a part of the city of Boston at that time, showed an increase in population of 13,440, making a total increase for the period named of 30,790 for all the various parts which make up the city of Boston of to-day. Comprehending, therefore, in the analysis of the increase of population for subsequent decades all the territory within the city of Boston as at present constituted, we find that between 1860 and 1865 there was a total gain of 21,130, of which 7,520 was in Boston proper, 6,958 in the annexed territory, and 6,652 in the territory not annexed at that time. Between 1865 and 1870, there was an increase of 23,876 for the same territory, Boston proper showing a loss of 2,302 persons, while its annexed territory gained 19,065, Roxbury and Dorchester having been annexed during this period; in the territory not yet annexed there was an increase of 4,811. During the next period, or from 1870 to 1875, occurred the annexations of Charlestown, West Roxbury, and Brighton, the total population for the city as a whole being 341,919, as compared with a population for the same territory in 1870 of 292,502, an increase of 49,417, of which 1,888 was in the city proper and 47,529 in the annexed territory. From 1875 to 1880, there was a gain of 6,406 in the city proper and 14,514 in the annexed territory, or a total gain of 20,920, while from 1880 to 1885 the total increase was 27,554, all but 63 of this increase being in the annexed territory. The average

increase for the six half decades named was 28,948. It will be seen, therefore, that the gain during the last half decade was quite up to the average gain for the half decades since 1855. The gain during the last half decade, too, has been greater than in any other half decade mentioned, except for those between 1855 and 1860, and 1870 and 1875. Between 1870 and 1875 there was an abnormal growth not only in the city, but in the State. The revival of industries, great bodies of immigrants coming in, the speculative fever, all conspired to increase our population beyond the normal rate.

“ In examining the growth in detail by different parts of the city we find that in the period between 1855 and 1860 the city shows a gain of 10.81 per cent, while during the next five years, 1860 to 1865, the gain was but 8.14 per cent. No territory had been gained by annexation except in the early history of the city. Population was seeking the suburban districts, and the ratio of increase was becoming less each year. Between 1865 and 1870 Boston gained 30.27 per cent in population, a gain almost entirely due to the annexation of Roxbury, in 1867, and Dorchester, in 1869, both rapidly growing suburbs. East Boston and South Boston made gains, but the city proper during this period not only did not grow, but on the contrary actually lost more than one per cent of its population. Between 1870 and 1875 the total gain was 36.48 per cent, but this large gain was mainly due to annexation and to the growth of recently annexed territory. Charlestown, West Roxbury, and Brighton came within the city limits in 1873, and 56.39 per cent of the total gain of the city's population was due to this source, and 21.01 per cent to growth within the districts of Roxbury and Dorchester. Since 1875 no new territory has been gained, and the capacity for expansion is, therefore, confined to the city area as now defined. Between 1875 and 1880 the city gained 6.12 per cent in population, but 55.15 per cent of the total gain took place in the four districts of Roxbury, Dorchester, West Roxbury, and Brighton. Between 1880 and 1885 the total gain of the city was 7.59 per cent, a larger ratio of growth than was shown in the previous five years; but 61.30 per cent of this growth, however, was in the four districts just named. The city proper shows no material change. Charlestown, although during this last period, 1880 to 1885, showing an increase of 3,942, has practically reached its limit of expansion. This is also true of East and South Boston. The increasing ratio of growth in Roxbury, West Roxbury, Dorchester, and Brighton as compared with the growth of the city, as a whole, indicates the direction of the future growth within the present city limits, while the inspection of growth in each Census period since 1855, in connection with the causes of the exceptional increase between 1865 and 1875, clearly indicates the fact that any marked increase of population must

be based upon future annexations. The territory of the four most rapidly growing districts, namely, Roxbury, Dorchester, West Roxbury, and Brighton, is over 77 per cent of the whole territory of Boston, and it is in this part of the territory of Boston as at present constituted that future gains must be made. Out of 27,554, the total growth of Boston between 1880 and 1885, 16,891 was in these four districts."

An inspection of the table will show that the growth during the five years from 1885 to 1890, as predicted in the above analysis, has been largely in the districts of Roxbury, West Roxbury, Dorchester, and Brighton. Charlestown has increased from 37,673 to 38,348. East Boston, with the islands in the harbor, from 31,419 to 36,930. South Boston, from 61,534 to 66,791. Dorchester, from 20,717 to 29,638. Roxbury, from 65,965 to 78,411. West Roxbury, from 17,424 to 24,997. Brighton, from 8,523 to 12,032. The city proper has grown from 147,138 to 161,330, while the population upon the annexed territory has increased from 243,255 to 287,147. The rate of increase in the city proper for the five years is 9.65 per cent, while that upon the annexed territory is 18.04 per cent. The following table shows the percentages of population of the entire city found in the different territorial divisions :

DIVISIONS OF BOSTON.	Population	Percentages
East Boston (including the islands), . . . . .	36,930	8.24
South Boston, . . . . .	66,791	14.89
Dorchester, . . . . .	29,638	6.61
West Roxbury, . . . . .	24,997	5.57
Brighton, . . . . .	12,032	2.68
Charlestown, . . . . .	38,348	8.55
Roxbury, . . . . .	78,411	17.49
The City proper, . . . . .	161,330	35.97
THE CITY, . . . . .	448,477	100.00

The city proper, it will be seen, still contains the largest per cent of the total population which is found in any single subdivision, namely, 35.97 per cent, or slightly more than one-third of the entire population of the city. In Roxbury is found 17.49 per cent, or about one-sixth of the total popula-

tion. In South Boston, 14.89 per cent, or about one-seventh of the total population. In East Boston, including the islands, 8.24 per cent, and in Charlestown 8.55 per cent, or about one-twelfth of the total population in each subdivision. Dorchester contains 6.61 per cent and West Roxbury 5.57 per cent, while 2.68 per cent is found in Brighton.

For the purpose of showing the growth in the different territorial divisions of the city, both numerically and by percentage rates, the following table is presented :

DIVISIONS OF BOSTON.	Increase in 1890 as compared with 1845	Percentages of Increase
The City proper, . . . . .	14,192	+9.65
East Boston (including the islands), . . . . .	5,511	+17.54
South Boston, . . . . .	5,257	+8.54
Dorchester, . . . . .	8,921	+43.06
West Roxbury, . . . . .	7,573	+43.46
Brighton, . . . . .	3,509	+41.17
Charlestown, . . . . .	675	+1.79
Roxbury, . . . . .	12,446	+18.87
THE CITY, . . . . .	58,084	+14.88

In order to discover the prominence of the industrial cities and towns in Massachusetts, as related to the growth of population, further analysis is necessary.

In the Decennial Census of Massachusetts, taken in 1885, it was shown that, exclusive of the city of Boston, there were 100 cities and towns leading in manufactures, each manufacturing goods exceeding one million dollars in value for the Census year. For the purpose of comparison we have grouped these cities and towns into six classes according to the value of product, the lowest class including establishments whose annual product was over \$1,000,000 but less than \$2,000,000, and the highest class those having an annual product exceeding \$10,000,000. The results are shown in the following table :



CLASSIFIED VALUE OF GOODS MADE.	TOTAL POPULATION OF CITIES AND TOWNS IN EACH CLASS			PERCENTAGES OF INCREASE	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
\$10,000,000 and over.	435,934	505,165	622,565	+23.24	+42.81
\$5,000,000, but under \$10,000,000.	142,492	157,518	174,916	+11.05	+22.75
\$4,000,000, but under \$5,000,000.	80,869	94,093	111,696	+18.71	+38.12
\$3,000,000, but under \$4,000,000.	91,017	103,883	121,015	+16.49	+32.96
\$2,000,000, but under \$3,000,000.	118,851	128,925	138,177	+7.18	+16.26
\$1,000,000, but under \$2,000,000.	146,767	160,926	190,955	+18.66	+30.11
TOTALS,	1,015,930	1,150,509	1,359,324	+18.15	+33.80

The first class of cities and towns in the above table, namely, those in which the annual product exceeded \$10,000,000, exhibits the largest percentage of growth in 1890 as compared with 1880, and also in 1890 as compared with 1885, these percentages being, respectively, 42.81 and 23.24. The third class, in which the annual product is more than \$4,000,000 but less than \$5,000,000 ranks next, the gain in 1890 as compared with 1880 being 38.12 per cent and in 1890 as compared with 1885, 18.71 per cent. The fourth class, in which the annual product exceeds \$3,000,000 but is less than \$4,000,000, ranks next as to the percentage shown in 1890 as compared with 1880, this percentage being 32.96, but is out-ranked for the five years 1885 to 1890 by the sixth class which stands next below it in the ratio for the ten years 1880 to 1890. The sixth class contains towns in which the annual product exceeded \$1,000,000 but did not exceed \$2,000,000; and the growth in 1890 as compared with 1880, in this class, was 30.11 per cent, and in 1890 as compared with 1885, 18.66 per cent. The second class of cities and towns, in which the annual product was larger than \$5,000,000 but less than \$10,000,000, ranks next with respect to growth for both periods, the percentage of gain in 1890 as compared with 1880 being 22.75, and in 1890 as compared with 1885, 11.05. The fifth class of cities and towns, in which the annual product was larger than \$2,000,000 but less than \$3,000,000, exhibits the least growth in 1890 as compared with 1880 and also in 1890 as compared with 1885, the percentages being, respectively, 16.26 and 7.18.

These 100 manufacturing cities and towns contain 60.71 per cent of the entire population of the State. In 1880, the same cities and towns contained 56.98 per cent of the entire popu-

lation, and in 1885, 59.24 per cent. They exhibit, therefore, an increase relatively greater than that shown in other municipalities. They have gained 33.80 per cent in population since 1880, while the rest of the State, including the city of Boston, gained but 14.66 per cent. Since 1885 they have gained 18.15 per cent, while the rest of the State, including the city of Boston, has gained but 11.11 per cent.

Although Boston ranks beyond every other city or town in the aggregate product of its productive industries, we have excluded the city from the group of manufacturing cities and towns, above considered, for the reason that its growth is largely due to interests outside those of local manufactures. If we exclude Boston entirely from the comparison we shall find that, while these 100 cities and towns had gained in 1890 as compared with 1880, 33.80 per cent, the rest of the State had gained but 6.63 per cent; and that while these cities and towns have gained 18.15 per cent, since 1885, the rest of the State has gained but 7.45 per cent. Excluding the city of Boston, the State, outside of these 100 manufacturing cities and towns, actually lost in population between 1880 and 1885, the decline being 0.76 per cent; but since 1885, as above stated, it has gained 7.45 per cent outside their limits.

While we class these 100 municipalities as manufacturing cities and towns, it must be remembered that they also include the suburban cities near Boston, and that part of the growth of such cities is due not only to manufacturing but to the causes which have contributed to the growth of Boston. Some other cities, also, have local interests besides those of manufacturing which have materially aided their growth. Chief among these is the city of Gloucester with its extensive fisheries. Broadly considered, it remains true, however, that the growth of these 100 municipalities is due to manufacturing.

Among the leading industries of Massachusetts are the following: Textiles, Boots and Shoes, Metals and Metallic Goods, Leather, Paper and Paper Goods, and Furniture. The product in these industries for the Census year 1885 was \$358,777,948, or 53.18 per cent of the total product of manufactures in the State. If, under these industry heads, we classify the cities and towns, placing each in the class representing the principal industry of the city or town, on the basis of persons employed, and include no municipality in which the product in the speci-

fied industry for the Census year did not reach \$300,000 in value, we arrive at certain results which are interesting as showing the growth of the industrial cities and towns.

Under the classification "Textiles" will be found the following cities and towns, which are arranged in tabular form with their population for 1880, 1885, and 1890 compared :

CITIES AND TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Adams, . . . . .	5,591	8,283	9,213	+11.23	+64.78
Great Barrington, . . . .	4,653	4,471	4,612	+3.15	-0.88
Hinsdale, . . . . .	1,595	1,656	1,739	+5.01	+9.03
North Adams, . . . . .	10,191	12,540	16,074	+28.18	+57.73
PITTSFIELD, . . . . .	13,364	14,466	17,281	+19.46	+29.31
FALL RIVER, . . . . .	48,961	56,870	74,398	+30.82	+51.95
NEW BEDFORD, . . . . .	26,845	33,393	40,733	+21.98	+51.73
TAUNTON, . . . . .	21,213	23,674	25,448	+7.49	+19.96
Amesbury, . . . . .	3,355	4,403	9,798	+122.53	+192.04
Andover, . . . . .	5,169	5,711	6,142	+7.55	+18.82
Groveland, . . . . .	2,227	2,272	2,191	-3.57	-1.62
Ipswich, . . . . .	3,699	4,207	4,439	+5.51	+20.01
LAWRENCE, . . . . .	39,151	38,862	44,654	+14.90	+14.06
Methuen, . . . . .	4,392	4,507	4,814	+6.81	+9.61
Saugus, . . . . .	2,625	2,855	3,673	+28.65	+39.92
CHICOPEE, . . . . .	11,286	11,516	14,050	+22.00	+24.49
Ludlow, . . . . .	1,526	1,649	1,939	+17.59	+27.06
Palmer, . . . . .	5,504	5,923	6,520	+10.08	+18.46
Ware, . . . . .	4,817	6,003	7,329	+22.09	+52.15
Billerica, . . . . .	2,000	2,161	2,380	+10.13	+19.00
Dracut, . . . . .	1,595	1,927	1,996	+3.58	+25.14
LOWELL, . . . . .	59,475	64,107	77,696	+21.20	+30.64
Maynard, . . . . .	2,291	2,703	2,700	-0.11	+17.85
Watertown, . . . . .	5,426	6,238	7,073	+13.39	+30.35
Westford, . . . . .	2,147	2,193	2,250	+2.60	+4.80
Dedham, . . . . .	6,233	6,641	7,123	+7.26	+14.28
Hyde Park, . . . . .	7,088	8,376	10,193	+21.69	+43.81
Walpole, . . . . .	2,494	2,443	2,604	+6.59	+4.41
Clinton, . . . . .	8,029	8,945	10,424	+16.54	+29.83
Dudley, . . . . .	2,803	2,742	2,944	+7.37	+5.03
FITCHBURG, . . . . .	12,429	15,375	22,037	+43.33	+77.30
Grafton, . . . . .	4,030	4,498	5,002	+11.20	+24.12
Holden, . . . . .	2,499	2,471	2,623	+6.15	+4.96
Leicester, . . . . .	2,779	2,923	3,120	+6.74	+12.27
Millbury, . . . . .	4,741	4,555	4,428	-2.79	-6.60
Northbridge, . . . . .	4,058	3,786	4,603	+21.58	+13.57
Southbridge, . . . . .	6,464	6,500	7,655	+17.77	+18.43
Sutton, . . . . .	3,105	3,101	3,180	+2.55	+2.42
Uxbridge, . . . . .	3,111	2,948	3,408	+15.60	+9.55
Warren, . . . . .	3,889	4,032	4,681	+16.10	+20.37
Webster, . . . . .	5,696	6,220	7,031	+13.04	+23.44
West Boylston, . . . . .	2,994	2,927	3,019	+3.14	+0.84
TOTALS, . . . . .	371,535	411,073	493,217	+19.98	+32.75

It will be seen that the population of these textile cities and towns, 371,535 in 1880, had become 411,073 in 1885 and 493,217 in 1890, a gain, in 1890 as compared with 1880, of 32.75 per cent, and a gain of 19.98 per cent in 1890 as compared with 1885. Every city and town in the group exhibits growth in 1890 as compared with 1885, except Groveland, Maynard, and Millbury.

The Boot and Shoe cities and towns are shown in the following table :

CITIES AND TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Beverly, . . . . .	8,456	9,186	10,821	+17.80	+27.97
Danvers, . . . . .	6,598	7,061	7,454	+5.57	+12.97
Essex, . . . . .	1,670	1,722	1,713	-0.52	+2.57
Georgetown, . . . . .	2,231	2,299	2,117	-7.92	-5.11
HAVERHILL, . . . . .	18,472	21,795	27,412	+25.77	+48.40
LYNN, . . . . .	38,274	45,867	55,727	+21.50	+45.60
Marblehead, . . . . .	7,467	7,517	8,202	+9.11	+9.84
NEWBURYPORT, . . . . .	13,538	13,716	13,947	+1.68	+3.02
Rowley, . . . . .	1,201	1,183	1,248	+5.49	+3.91
Salem, . . . . .	27,563	28,090	30,801	+9.65	+11.75
Ashland, . . . . .	2,394	2,633	2,532	-3.84	+5.76
Holliston, . . . . .	3,098	2,926	2,619	-10.49	-15.46
Hopkinton, . . . . .	4,601	3,922	4,088	+4.23	-11.15
Hudson, . . . . .	3,739	3,968	4,670	+17.69	+24.90
MARLBOROUGH, . . . . .	10,127	10,941	13,805	+26.18	+36.32
Natick, . . . . .	8,479	8,460	9,118	+7.78	+7.54
Pepperell, . . . . .	2,348	2,587	3,127	+20.87	+33.18
Stoneham, . . . . .	4,890	5,659	6,155	+8.76	+25.87
Braintree, . . . . .	3,855	4,040	4,848	+20.00	+25.76
Holbrook, . . . . .	2,130	2,334	2,474	+6.00	+16.15
Medway, . . . . .	3,956	2,777	2,985	+7.49	-24.54
Randolph, . . . . .	4,027	3,807	3,946	+3.65	-2.01
Stoughton, . . . . .	4,875	5,173	4,852	-6.21	-0.47
Weymouth, . . . . .	10,570	10,740	10,866	+1.17	+2.80
Abington, . . . . .	3,697	3,699	4,260	+15.17	+15.23
BROCKTON, . . . . .	13,608	20,783	27,294	+31.33	+100.57
Rockland, . . . . .	4,553	4,785	5,213	+8.94	+14.50
Whitman, . . . . .	3,024	3,595	4,441	+23.53	+46.86
Athol, . . . . .	4,307	4,758	6,319	+32.81	+46.71
Brookfield, . . . . .	2,820	3,013	3,352	+11.25	+18.87
Milford, . . . . .	9,310	9,343	8,780	-6.03	-5.69
North Brookfield, . . . . .	4,459	4,201	3,871	-7.86	-13.19
Spencer, . . . . .	7,466	8,247	8,747	+6.06	+17.16
Westborough, . . . . .	5,214	4,880	5,195	+6.45	-0.36
TOTALS, . . . . .	253,017	275,707	312,999	+13.53	+23.71

Of these cities and towns the population was 253,017 in 1880, 275,707 in 1885, and 312,999 in 1890, a gain, in 1890 as compared with 1880, of 23.71 per cent and a gain of 13.53 per cent in 1890 as compared with 1885. Some of the towns in this group show a decline in population. These are exceptional instances, however, and the decline can generally be legitimately explained. For instance, the decrease shown in Milford is due to the incorporation of the town of Hopedale out of its territory. In North Brookfield the loss is due to commercial reverses affecting the establishment engaged in the industry. In some of the smaller towns the decline is due to the removal of establishments to other centres of the industry. In a few cases where a loss is shown the result would have been different had the census been taken at a different time of the year, instead of in June when the establishments were not employing their full quota.

The cities and towns which lead in the manufacture of Metals and Metallic Goods are tabulated below.

CITIES AND TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Attleborough,* . . .	11,111	13,175	14,304	+8.57	+28.74
Mansfield, . . .	2,765	2,939	3,432	+16.77	+24.12
Somerset, . . .	2,006	2,475	2,106	-14.91	+1.99
Montague, . . .	4,875	5,629	6,296	+11.85	+29.15
Canton, . . .	4,516	4,380	4,538	+3.61	+0.49
Bridgewater, . . .	3,620	3,827	4,249	+11.03	+17.38
Wareham, . . .	2,896	3,254	3,451	+6.05	+19.16
WORCESTER, . . .	58,291	68,389	84,655	+23.78	+45.23
TOTALS, . . .	90,080	104,068	123,031	+18.22	+36.58

\* Including also North Attleborough in 1890.

In these cities and towns the population in 1880 was 90,080, while in 1885 the population had become 104,068, and in 1890, 123,031, a gain of 36.58 per cent in 1890 as compared with 1880, and 18.22 per cent in 1890 as compared with 1885. In the table the town of North Attleborough has been included with Attleborough in 1890, as it formed part of that town in 1880 and 1885, and it was desirable to maintain the comparison

on the same basis. Each town exhibits growth. The industries of Attleborough are chiefly manufactures of jewelry in which the precious metals are employed. In the other towns iron and steel are the metals principally used.

The following table presents the cities and towns in which the manufacture of Leather is the leading industry :

CITIES AND TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Peabody, . . . .	9,028	9,530	10,158	+6.59	+12.52
Winchester, . . . .	3,802	4,390	4,861	+10.73	+27.85
WOBBURN, . . . .	10,931	11,750	13,499	+14.89	+23.49
TOTALS, . . . .	23,761	25,670	28,518	+11.09	+20.02

The population in this group was 23,761 in 1880, 25,670 in 1885, and 28,518 in 1890. The gain, in 1890 as compared with 1880, was 20.02 per cent, and in 1890 as compared with 1885, 11.09 per cent. Each town exhibits growth.

The following cities and towns lead in the manufacture of Paper and Paper Goods :

CITIES AND TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Dalton, . . . . .	2,052	2,113	2,885	+36.54	+40.59
Lee, . . . . .	3,939	4,274	3,785	-11.44	-3.91
HOLYOKE, . . . . .	21,915	27,895	35,637	+27.75	+62.61
Russell, . . . . .	823	847	879	+3.78	+6.80
West Springfield, . . . .	4,149	4,448	5,077	+14.14	+22.37
South Hadley, . . . .	3,538	3,949	4,261	+7.90	+20.44
TOTALS, . . . . .	36,416	43,526	52,524	+20.67	+44.23

The population of the above cities and towns was 36,416 in 1880, 43,526 in 1885, and 52,524 in 1890. The percentage of gain, in 1890 as compared with 1880, was 44.23, and in 1890 as compared with 1885, 20.67. The failure of some of the smaller mills in the industry accounts for the loss in Lee.

The following group comprises the towns leading in the manufacture of Furniture:

TOWNS.	POPULATION			PERCENTAGES	
	1880	1885	1890	1890 as compared with 1885	1890 as compared with 1880
Wakefield, . . .	5,547	6,060	6,982	+15.21	+25.87
Ashburnham, . . .	1,666	2,058	2,074	+0.78	+24.49
Gardner, . . .	4,988	7,283	8,424	+15.67	+68.89
Templeton, . . .	2,789	2,627	2,999	+14.16	+7.53
TOTALS, . . .	14,990	18,028	20,479	+13.60	+36.62

In these towns the population in 1880 was 14,990, in 1885, 18,028, and in 1890, 20,479. The gain, in 1890 as compared with 1880, was 36.62 per cent, and in 1890 as compared with 1885, 13.60 per cent. In Wakefield, the industry is devoted to the manufacture of rattan furniture, while the manufacture of wooden chairs leads in the other towns in the group.

The following summary is presented for the purpose of easily comparing the percentages of gain at each Census period of all the industrial cities and towns in the preceding tables:

CLASSIFICATION BY INDUSTRIES.	PERCENTAGES OF INCREASE	
	1890 as compared with 1885	1890 as compared with 1880
Textiles, . . . . .	+19.98	+32.75
Boots and shoes, . . . . .	+13.53	+23.71
Metals and metallic goods, . . . . .	+18.22	+36.58
Leather, . . . . .	+11.09	+20.02
Paper and paper goods, . . . . .	+20.67	+44.23
Furniture, . . . . .	+13.60	+36.62

If we rank the cities and towns by industries according to the percentage of growth, in each class, shown in 1890 as compared with 1885, the groups take the following order: Paper and Paper Goods, Textiles, Metals and Metallic Goods, Furniture, Boots and Shoes, and Leather; while if ranked according to the percentage rate of growth in 1890 as com-

pared with 1880, the order will be as follows: Paper and Paper Goods, Furniture, Metals and Metallic Goods, Textiles, Boots and Shoes, and Leather.

If it be borne in mind that the rate of growth for the State, from 1880 to 1890, was 25.57 per cent, it will be seen that each industrial group named above has made a larger gain, except Boots and Shoes and Leather; and while the rate of growth for the State, from 1885 to 1890, is 15 28 per cent, this rate is not reached by either of the groups, except Textiles, Metals and Metallic Goods, and Paper and Paper Goods, although Boots and Shoes and Furniture do not greatly fall below it. It must be remembered, in considering the foregoing tables, that the classification is slightly arbitrary and is made, as before stated, upon the basis of the industry which leads for the city or town in the number of persons employed. Some places have diversified industries, and while they are classed under the industry which leads, it is frequently the case that other industrial interests have contributed to their growth. For instance, Holyoke is classed as a paper town; but it has, besides, large textile industries. The city of Taunton, while classed as a textile town, is engaged largely in the manufacture of metals and metallic goods. The same is true of Lowell, which has, in addition to its textile industries, large establishments devoted to the manufacture of metals and metallic goods and machinery. The city of Lynn, besides its boot and shoe industry, is, to a certain extent, engaged in the manufacture of leather; and the same is true of the city of Salem. Worcester, classed as leading in the manufacture of metals and metallic goods, has largely diversified industries among which Machines and Machinery, Textiles, and Boots and Shoes lead. With these limitations the classification is accurate.

We close this analysis with the following notes showing the changes in town names, areas, boundaries, etc., which have taken place between May 1, 1885, and January 1, 1891. Changes in boundary lines do not, in most cases, materially affect the territory of the towns.



## NOTES.

CHANGES IN TOWN NAMES, AREAS, BOUNDARIES, ETC., MADE BETWEEN  
MAY 1, 1885, AND JANUARY 1, 1891.

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## COUNTY OF BARNSTABLE.

- Eastham. Boundary line between Eastham and Wellfleet established, May 6, 1887.  
Falmouth. Boundary line between Falmouth and Mashpee established, June 18, 1885.  
Mashpee. Boundary line between Mashpee and Falmouth established, June 18, 1885.  
Wellfleet. Boundary line between Wellfleet and Eastham established, May 6, 1887.

## COUNTY OF BERKSHIRE.

- PITTSFIELD. Became a city, January 1, 1891.

## COUNTY OF BRISTOL.

- Attleborough. Town divided and part incorporated as the town of North Attleborough, June 14, 1887.  
Dartmouth. Boundary line between Dartmouth and New Bedford changed and a part of Dartmouth annexed to New Bedford, May 3, 1888.  
NEW BEDFORD. Boundary line between New Bedford and Dartmouth changed and a part of Dartmouth annexed to New Bedford, May 3, 1888.  
North Attleborough. The town of North Attleborough was set off from the town of Attleborough, June 14, 1887.

## COUNTY OF ESSEX.

- Amesbury. Part of Salisbury annexed to Amesbury, June 16, 1886.  
Salisbury. Part of Salisbury annexed to Amesbury, June 16, 1886.

## COUNTY OF FRANKLIN.

- Bernardston. Part of Leyden annexed to Bernardston, May 7, 1886.  
Leyden. Part of Leyden annexed to Bernardston, May 7, 1886.

## COUNTY OF HAMPDEN.

- CHICOPEE. Became a city, January 1, 1891.  
Longmeadow. Part of Longmeadow annexed to Springfield, June 2, 1890.  
SPRINGFIELD. Part of Longmeadow annexed to Springfield, June 2, 1890.

## COUNTY OF MIDDLESEX.

- Boxborough. Boundary line between Boxborough and Littleton established, April 30, 1890.  
Littleton. Boundary line between Littleton and Boxborough established, April 30, 1890

## COUNTY OF MIDDLESEX — Continued.

**LOWELL.** Part of Tewksbury annexed to Lowell, May 17, 1888.

**MARLBOROUGH.** Became a city, January 1, 1891

**Stoneham.** Part of Stoneham annexed to Wakefield, March 13, 1889.

**Tewksbury.** Part of Tewksbury annexed to Lowell, May 17, 1888.

**Wakefield.** Part of Stoneham annexed to Wakefield, March 13, 1889.

**WOBURN.** Became a city, January 1, 1889.

## COUNTY OF NORFOLK.

**Avon.** The town of Avon was set off from the town of Stoughton, February 21, 1888. Part of Holbrook annexed to Avon, April 16, 1889.

Part of Randolph annexed to Avon, April 16, 1889.

**Brookline.** Boundary line between Brookline and city of Boston changed and established, May 27, 1890.

**Holbrook.** Part of Holbrook annexed to Avon, April 16, 1889.

**QUINCY.** Became a city, January 1, 1889.

**Randolph.** Part of Randolph annexed to Avon, April 16, 1889.

**Stoughton.** Part of Stoughton set off and incorporated as the town of Avon, February 21, 1888.

## COUNTY OF PLYMOUTH.

**Norwell.** Name changed from South Scituate, by Act of February 27, 1888. Accepted by the town, March 5, 1888.

**Whitman.** Name changed from South Abington, by Act of March 5, 1886. Accepted by the town, May 3, 1886.

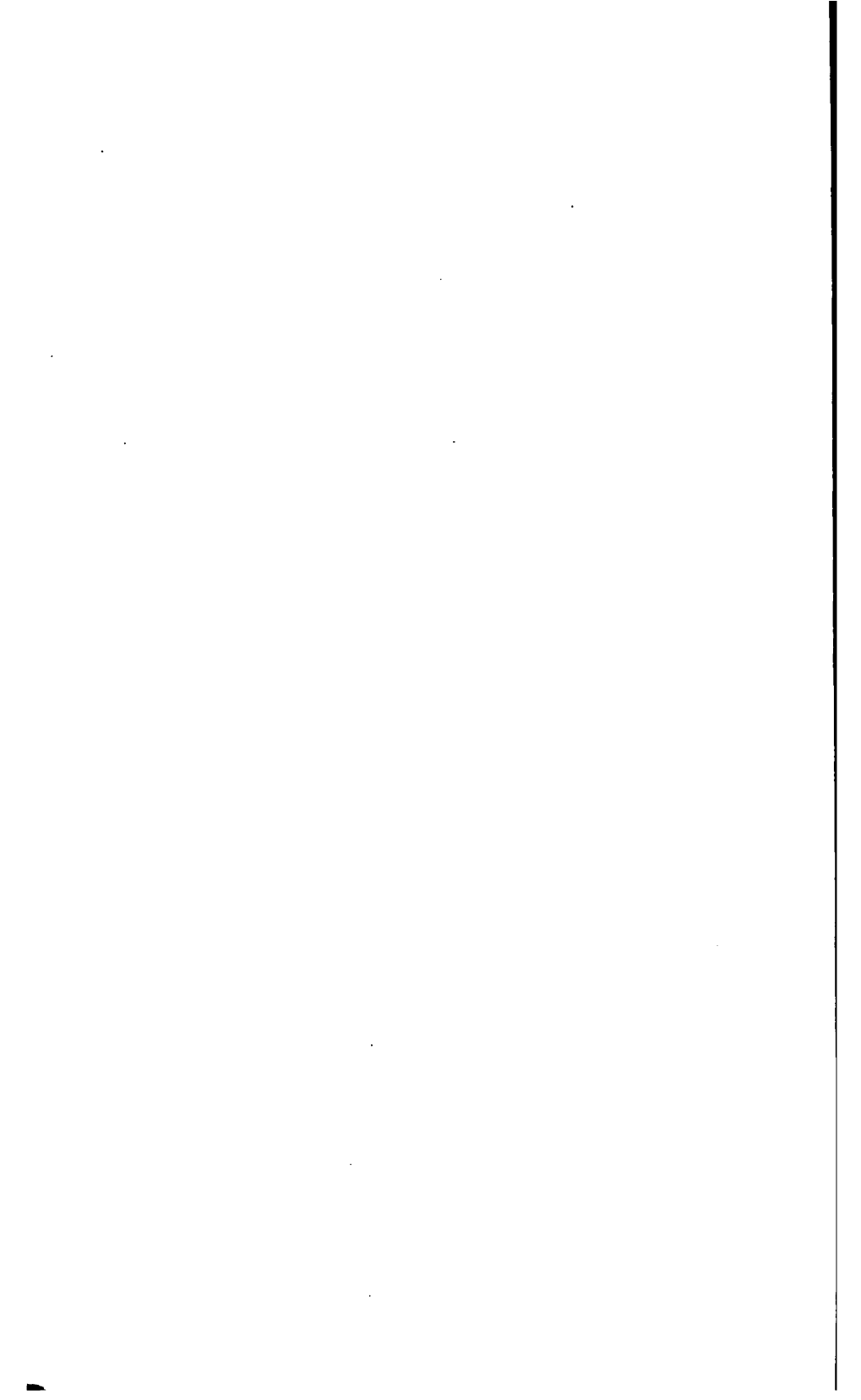
## COUNTY OF SUFFOLK.

**Boston.** Boundary line changed and established between city of Boston and Brookline, May 27, 1890.

## COUNTY OF WORCESTER.

**Hopedale.** The town of Hopedale was set off from the town of Milford, April 7, 1886.

**Milford.** Town divided and part incorporated as the town of Hopedale, April 7, 1886.



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PART III.

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ABANDONED FARMS.

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## PART III.

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### ABANDONED FARMS.

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The growth of the factory town, the general movement of the population toward the city, and the abandonment of farm land in certain sections are important features of modern social life. The present Part deals with abandoned farms in Massachusetts, and aims to determine statistically in what parts of the State and to what extent agricultural land has been abandoned, and what effect this has had on agriculture as an industry and, inferentially, on the general industrial prosperity of the Commonwealth. It does not attempt to show conclusively the causes of the abandonment of such farms, although incidentally it may throw some light on that branch of the subject; nor does it aim to suggest a remedy for agricultural depression if such is found to exist. That is not within the province of this Bureau but particularly belongs to another efficient branch of the State service, which deals especially with agriculture. As a department of its statistical work, however, this Bureau has regularly collected, through the Decennial Census, complete information as to the agricultural resources and prosperity of Massachusetts, and the present inquiry relating to the abandonment of cultivated land fitly supplements the otherwise exhaustive reports of the Census, and by means of comparisons therewith on a purely statistical basis permits accurate conclusions as to economic results.

The movement of population from the country toward the town undoubtedly concerns the industrial prosperity of the State and affects, either for good or ill, the social welfare of wage workers whether employed in agriculture or not. An investigation of a subject directly related to this movement,

therefore, comes distinctly within the province of this Bureau. It is undoubtedly a question not merely of agriculture but of economics, intimately related to the production and distribution of wealth.

#### THE SOURCES OF INFORMATION.

The returns as to abandoned farms were made directly to the Bureau by the assessors of the several towns at the close of the year 1889 and early in the present year, 1890. They are, therefore, from official sources, and may be depended upon as accurate, so far as the assessors, who have knowledge respecting the real property in each town, could intelligently reply to the inquiries. They are complete for the entire State except for the towns of Colrain, Granville, North Attleborough, Norwell, Plymouth, and Phillipston. For these towns no returns were made; but, except in three of them, namely, Colrain, Granville, and Phillipston, no considerable tracts of abandoned farm land are likely to exist, and returns from these, if such land were found there, would not materially affect the results of the inquiry. Therefore, as statistics from these towns do not appear in the tables, it will be understood that they do not enter into the aggregates or recapitulations. The cities have, of course, been omitted.

#### DEFINITION OF "ABANDONED FARM."

Many farms in the Commonwealth have been abandoned by their owners, but not abandoned as to cultivation. Such farms have been leased to their present occupants, who derive a living from them, or have been sold to other farmers and incorporated with other farms. The result of the transfers last indicated is to reduce the number of farms in the State, but not the number of acres of cultivated land. Many farms formerly cultivated for various crops are now mainly devoted to the production of hay or dairy products; and, in some cases, land formerly cultivated is now to be classed as woodland. Such changes are merely changes in the form of crop and if made by the farmer for the reason that, all things considered, it is found more profitable at present to raise hay, dairy products, or wood than vegetables or grain, do not involve an abandonment of the farm, although possibly the abandonment of the mode of cultivation formerly employed. In order to secure uniformity and the greatest possible accuracy in the returns, and to elimi-

nate as far as possible the effect of differences of judgment, in replying to our inquiries, as to what should be considered an abandoned farm, the following definition was placed upon the blanks sent out to the assessors :

“ By ‘ Abandoned Farms ’ in this inquiry are meant those formerly cultivated but now deserted, upon which cultivation is now abandoned, and the buildings, if any, unoccupied and permitted to fall into decay. In some cases the grass is still cut on these farms but nothing is done in the way of enrichment of the soil, and the land is practically unproductive and left to run wild.”

The returns were made in accordance with this explanation, which describes what is generally understood by the term abandoned farm, and the following statistical tables, so far as they refer to such farms, are limited by the definition given. Of course, in some of the towns there may be and probably are farms upon which cultivation is at a low ebb as compared with former days. Such farms are not yet abandoned and therefore are not within the scope of this inquiry.

#### THE STATISTICAL TABLES.

The statistical tables embodying the returns and such other data as may be related to the subject are the following :

Table I. (pages 182 to 193) presents the number of abandoned farms, either with or without buildings, the acreage of such farms, the assessed valuation, and the estimated market value per acre.

Table II. (pages 194 to 199) presents the total acreage of farm land with the value thereof, in comparison with the acreage of abandoned farms, and the assessed valuation of such farms.

Table III. (pages 200 to 212) presents the comparative values of farm products and property, with comparisons for the Census years 1875 and 1885.

Table IV. (pages 213 to 219) presents the acreage of cultivated land and shows in acres and percentages the increase or decrease in the Census year 1885 as compared with 1875.

All values given in the tables are in GOLD, in order that the basis of comparison may be unfluctuating. These presentations are by towns in detail, with county and State recapitulations. They are followed by an analysis of the subject and are, therefore, introduced without further explanation.



## ABANDONED FARMS IN MASSACHUSETTS.

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms without Buildings	Total
1	<b>BARNSTABLE.</b>	13	2	15
2	Barnstable, . . . . .	-	-	-
3	Bourne, . . . . .	2	-	2
4	Brewster, . . . . .	-	-	-
5	Chatham, . . . . .	-	-	-
6	Dennis, . . . . .	-	-	-
7	Eastham, . . . . .	10	2	12
8	Falmouth, . . . . .	-	-	-
9	Harwich, . . . . .	-	-	-
10	Mashpee, . . . . .	-	-	-
11	Orleans, . . . . .	-	-	-
12	Provincetown, . . . . .	-	-	-
13	Sandwich, . . . . .	1	-	1
14	Truro, . . . . .	-	-	-
15	Wellfleet, . . . . .	-	-	-
16	Yarmouth, . . . . .	-	-	-
17	<b>BERKSHIRE.</b>	120	92	212
18	Adams, . . . . .	1	-	1
19	Alford, . . . . .	2	1	3
20	Becket, . . . . .	19	9	28
21	Cheshire, . . . . .	-	3	3
22	Clarksburg, . . . . .	-	-	-
23	Dalton, . . . . .	-	-	-
24	Egremont, . . . . .	-	-	-
25	Florida, . . . . .	3	4	7
26	Great Barrington, . . . . .	-	1	1
27	Hancock, . . . . .	-	-	-
28	Hinsdale, . . . . .	-	1	1
29	Lanesborough, . . . . .	-	-	-
30	Lee, . . . . .	-	-	-
31	Lenox, . . . . .	-	-	-
32	Monterey, . . . . .	3	3	6
33	Mount Washington, . . . . .	2	1	3
34	New Ashford, . . . . .	-	1	1
35	New Marlborough, . . . . .	13	4	17
36	North Adams, . . . . .	15	17	32
37	Otis, . . . . .	13	3	16
38	Peru, . . . . .	-	-	-
39	Pittsfield, . . . . .	6	1	7
40	Richmond, . . . . .	8	10	18
41	Sandisfield, . . . . .	7	23	30
42	Savoy, . . . . .	-	-	-
43	Sheffield, . . . . .	-	-	-
44	Stockbridge, . . . . .	-	-	-
45	Tyringham, . . . . .	-	-	-
46	Washington, . . . . .	14	-	14
47	West Stockbridge, . . . . .	-	-	-
48	Williamstown, . . . . .	-	-	-
49	Windsor, . . . . .	14	10	24
50	<b>BRISTOL.</b>	33	19	52
51	Acushnet, . . . . .	-	-	-
52	Attleborough, . . . . .	1	-	1
53	Berkley, . . . . .	-	-	-
54	Dartmouth, . . . . .	-	-	-
55	Dighton, . . . . .	-	-	-
56	Easton, . . . . .	5	-	5
57	Fairhaven, . . . . .	-	-	-
58	Free town, . . . . .	3	1	4
59	Mansfield, . . . . .	2	-	2
60	North Attleborough,* . . . . .	-	-	-
61	Norton, . . . . .	-	-	-
62	Raynham, . . . . .	-	-	-
63	Rehoboth, . . . . .	6	8	14
64	Seekonk, . . . . .	-	-	-
65	Somerset, . . . . .	-	-	-

\* No return made.

## ABANDONED FARMS IN MASSACHUSETTS.

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
416	50	466	\$10,550	\$500	\$11,050	-	1
-	-	-	-	-	-	-	2
178	-	178	2,150	-	2,150	\$10.00	3
-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	5
225	50	275	6,700	500	7,200	10.00	6
-	-	-	-	-	-	-	7
-	-	-	-	-	-	-	8
-	-	-	-	-	-	-	9
-	-	-	-	-	-	-	10
-	-	-	-	-	-	-	11
13	-	13	1,700	-	1,700	10.00	12
-	-	-	-	-	-	-	13
-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	16
16,195	11,202	27,397	\$85,535	\$45,210	\$130,745	-	17
140	-	140	600	-	600	\$4.00	18
305	80	385	3,200	1,000	4,200	10.00	19
2,926	1,176	4,102	11,585	6,400	17,985	4.38	20
-	300	300	-	1,800	1,800	4.44	21
-	-	-	-	-	-	-	22
-	-	-	-	-	-	-	23
-	-	-	-	-	-	-	24
245	356	601	1,270	2,340	3,610	6.06	25
-	370	370	-	5,000	5,000	50.00	26
-	114	114	-	500	500	-	27
-	-	-	-	-	-	-	28
-	-	-	-	-	-	-	29
500	375	875	4,250	1,860	6,110	-	30
711	45	756	3,700	400	4,100	6.00	31
-	100	100	-	500	500	5.00	32
2,301	555	2,856	11,470	1,550	13,020	5.00	33
1,875	2,200	4,075	5,625	4,400	10,025	-	34
2,182	290	2,472	8,675	1,270	9,945	4.00 - 6.00	35
-	-	-	-	-	-	-	36
478	52	530	10,110	700	10,810	-	37
1,000	1,500	2,500	4,250	3,750	8,000	3.20	38
666	2,203	2,869	3,675	7,880	11,555	4.50	39
-	-	-	-	-	-	-	40
-	-	-	-	-	-	-	41
-	-	-	-	-	-	-	42
1,000	-	1,000	8,225	-	8,225	-	43
-	-	-	-	-	-	-	44
-	-	-	-	-	-	-	45
1,366	1,426	3,292	8,900	6,060	14,960	2.00 - 5.00	46
-	-	-	-	-	-	-	47
-	-	-	-	-	-	-	48
1,663½	558	2,221½	\$33,240	\$7,625	\$40,865	-	49
-	-	-	-	-	-	-	50
74	-	74	1,250	-	1,250	\$10.00	51
-	-	-	-	-	-	-	52
-	-	-	-	-	-	-	53
-	-	-	-	-	-	-	54
419	-	419	9,155	-	9,155	15.00	55
168	57	225	5,950	800	6,750	20.00	56
51½	-	51½	685	-	685	10.00	57
-	-	-	-	-	-	-	58
-	-	-	-	-	-	-	59
-	-	-	-	-	-	-	60
-	-	-	-	-	-	-	61
175	150	325	2,500	1,500	4,000	12.00	62
-	-	-	-	-	-	-	63
-	-	-	-	-	-	-	64
-	-	-	-	-	-	-	65

*Abandoned Farms in Massachusetts — Continued.*

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms with- out Buildings	Total
	<b>BRISTOL—Con.</b>			
1	Swansea, . . . . .	—	8	8
2	Westport, . . . . .	16	2	18
8	<b>DUKES.</b>	10	1	11
4	Chilmark, . . . . .	2	—	2
5	Cottage City, . . . . .	—	—	—
6	Edgartown, . . . . .	6	1	7
7	Gay Head, . . . . .	—	—	—
8	Gosnold, . . . . .	—	—	—
9	Tisbury, . . . . .	2	—	2
10	<b>ESSEX.</b>	2	—	2
11	Amesbury, . . . . .	—	—	—
12	Andover, . . . . .	—	—	—
13	Beverly, . . . . .	—	—	—
14	Boxford, . . . . .	—	—	—
15	Bradford, . . . . .	—	—	—
16	Danvers, . . . . .	—	—	—
17	Essex, . . . . .	—	—	—
18	Georgetown, . . . . .	—	—	—
19	Groveland, . . . . .	1	—	1
20	Hamilton, . . . . .	—	—	—
21	Ipswich, . . . . .	—	—	—
22	Lynnfield, . . . . .	—	—	—
23	Manchester, . . . . .	—	—	—
24	Marblehead, . . . . .	—	—	—
25	Merrimac, . . . . .	—	—	—
26	Methuen, . . . . .	—	—	—
27	Middleton, . . . . .	1	—	1
28	Nahant, . . . . .	—	—	—
29	Newbury, . . . . .	—	—	—
30	North Andover, . . . . .	—	—	—
31	Peabody, . . . . .	—	—	—
32	Rockport, . . . . .	—	—	—
33	Rowley, . . . . .	—	—	—
34	Salisbury, . . . . .	—	—	—
35	Saugus, . . . . .	—	—	—
36	Swampscott, . . . . .	—	—	—
37	Topsfield, . . . . .	—	—	—
38	Wenham, . . . . .	—	—	—
39	West Newbury, . . . . .	—	—	—
40	<b>FRANKLIN.</b>	113	116	229
41	Ashfield, . . . . .	8	7	15
42	Bernardston, . . . . .	8	3	6
43	Buckland, . . . . .	—	—	—
44	Charlemont, . . . . .	1	3	4
45	Colrain,* . . . . .	—	—	—
46	Conway, . . . . .	6	3	9
47	Deerfield, . . . . .	—	—	—
48	Erving, . . . . .	—	—	—
49	Gill, . . . . .	—	—	—
50	Greenfield, . . . . .	—	—	—
51	Hawley, . . . . .	12	12	24
52	Heath, . . . . .	7	—	7
53	Leverett, . . . . .	—	—	—
54	Leyden, . . . . .	—	—	—
55	Monroe, . . . . .	—	—	—
56	Montague, . . . . .	—	—	—
57	New Salem, . . . . .	7	1	8
58	Northfield, . . . . .	7	5	12
59	Orange, . . . . .	—	9	9
60	Rowe, . . . . .	8	2	5
61	Shelburne, . . . . .	—	—	—
62	Shutesbury, . . . . .	17	15	32

\* No return made.

*Abandoned Farms in Massachusetts — Continued.*

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
-	297	297	-	\$4,775	\$4,775	\$18.00	1
776	54	830	\$13,700	550	14,250	6.00 - 30.00	2
607	38	645	\$6,670	\$250	\$6,920	-	3
87	-	87	920	-	920	-	4
395	38	433	4,500	250	4,750	-	5
-	-	-	-	-	-	-	6
125	-	125	1,250	-	1,250	\$15.00	7
114	-	114	\$2,910	-	\$2,910	-	8
-	-	-	-	-	-	-	9
-	-	-	-	-	-	-	10
-	-	-	-	-	-	-	11
-	-	-	-	-	-	-	12
-	-	-	-	-	-	-	13
-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	16
-	-	-	-	-	-	-	17
64	-	64	1,680	-	1,680	\$19.25	18
-	-	-	-	-	-	-	19
-	-	-	-	-	-	-	20
-	-	-	-	-	-	-	21
-	-	-	-	-	-	-	22
-	-	-	-	-	-	-	23
-	-	-	-	-	-	-	24
-	-	-	-	-	-	-	25
50	-	50	1,230	-	1,230	-	26
-	-	-	-	-	-	-	27
-	-	-	-	-	-	-	28
-	-	-	-	-	-	-	29
-	-	-	-	-	-	-	30
-	-	-	-	-	-	-	31
-	-	-	-	-	-	-	32
-	-	-	-	-	-	-	33
-	-	-	-	-	-	-	34
-	-	-	-	-	-	-	35
-	-	-	-	-	-	-	36
-	-	-	-	-	-	-	37
-	-	-	-	-	-	-	38
-	-	-	-	-	-	-	39
8,150	10,617	18,766	\$65,314	\$52,120	\$117,434	-	40
1,000	1,050	2,050	5,100	4,700	9,800	\$6.00	41
150	300	450	1,500	2,000	3,500	7.00	42
-	-	-	-	-	-	-	43
90	330	420	400	1,500	1,900	-	44
-	-	-	-	-	-	-	45
395	259	654	8,454	1,500	4,954	5.00	46
-	-	-	-	-	-	-	47
-	-	-	-	-	-	-	48
-	-	-	-	-	-	-	49
-	-	-	-	-	-	-	50
1,062	1,567	2,629	8,475	5,985	14,460	-	51
616	-	616	3,500	-	3,500	7.00	52
-	-	-	-	-	-	-	53
-	-	-	-	-	-	-	54
-	-	-	-	-	-	-	55
-	-	-	-	-	-	-	56
345	50	395	5,300	300	5,600	14.00	57
255	431	686	3,025	1,950	4,975	-	58
-	450	450	-	2,250	2,250	6.00	59
277	848	626	2,500	1,225	3,725	4.50	60
-	-	-	-	-	-	-	61
1,351	1,212	2,563	13,635	5,665	19,200	8.00	62

*Abandoned Farms in Massachusetts — Continued.*

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms without Buildings	Total
	<b>FRANKLIN — Con.</b>			
1	Sunderland, . . . . .	—	—	—
2	Warwick, . . . . .	18	33	51
3	Wendell, . . . . .	22	17	39
4	Whately, . . . . .	2	1	3
5	<b>HAMPDEN.</b>	101	112	213
6	Agawam, . . . . .	—	—	—
7	Blandford, . . . . .	13	8	21
8	Brimfield, . . . . .	8	5	13
9	Chester, . . . . .	17	9	26
10	Chicopee, . . . . .	—	—	—
11	Granville,* . . . . .	—	—	—
12	Hampden, . . . . .	—	—	—
13	Holland, . . . . .	11	4	15
14	Longmeadow, . . . . .	—	—	—
15	Ludlow, . . . . .	—	—	—
16	Monson, . . . . .	18	33	51
17	Montgomery, . . . . .	—	—	—
18	Palmer, . . . . .	—	—	—
19	Russell, . . . . .	—	2	2
20	Southwick, . . . . .	26	40	66
21	Tolland, . . . . .	5	1	6
22	Wales, . . . . .	3	3	6
23	Westfield, . . . . .	—	2	2
24	West Springfield, . . . . .	—	—	—
25	Wilbraham, . . . . .	—	5	5
26	<b>HAMPSHIRE.</b>	92	124	216
27	Amherst, . . . . .	—	—	—
28	Belchertown, . . . . .	9	4	13
29	Chesterfield, . . . . .	20	21	41
30	Cummington, . . . . .	8	1	9
31	Easthampton, . . . . .	—	—	—
32	Enfield, . . . . .	1	5	6
33	Goshen, . . . . .	—	—	—
34	Granby, . . . . .	2	—	2
35	Greenwich, . . . . .	2	2	4
36	Hadley, . . . . .	—	—	—
37	Hatfield, . . . . .	—	—	—
38	Huntington, . . . . .	7	40	47
39	Middlefield, . . . . .	7	6	13
40	Pelham, . . . . .	9	1	10
41	Plainfield, . . . . .	5	14	19
42	Prescott, . . . . .	8	1	9
43	South Hadley, . . . . .	—	—	—
44	Southampton, . . . . .	—	—	—
45	Ware, . . . . .	4	1	5
46	Westhampton, . . . . .	4	24	28
47	Williamsburg, . . . . .	—	—	—
48	Worthington, . . . . .	6	4	10
49	<b>MIDDLESEX.</b>	52	24	76
50	Acton, . . . . .	—	—	—
51	Arlington, . . . . .	—	—	—
52	Ashby, . . . . .	3	5	8
53	Ashland, . . . . .	3	—	3
54	Ayer, . . . . .	—	—	—
55	Bedford, . . . . .	1	—	1
56	Belmont, . . . . .	—	—	—
57	Billerica, . . . . .	—	—	—
58	Boxborough, . . . . .	—	—	—
59	Burlington, . . . . .	1	1	2
60	Carlisle, . . . . .	—	—	—
61	Chelmsford, . . . . .	—	—	—
62	Concord, . . . . .	—	—	—

\* No return made.

*Abandoned Farms in Massachusetts — Continued.*

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
-	-	-	-	-	-	-	1
796	3,245	4,041	\$11,045	\$21,000	\$32,045	\$5.00	2
1,800	1,300	3,100	6,600	3,350	9,950	2.50	3
22	75	97	880	695	1,575	10.00	4
10,364	6,472	16,836	\$71,393	\$44,950	\$116,343	-	5
-	-	-	-	-	-	-	6
2,690	963	3,652	15,300	4,350	19,650	\$5.00	7
940	547	1,487	6,700	3,400	10,100	5.00	8
2,743	1,157	3,900	11,808	6,855	18,663	-	9
-	-	-	-	-	-	-	10
-	-	-	-	-	-	-	11
742	219	961	6,880	1,005	7,885	6.51	12
-	-	-	-	-	-	-	13
-	-	-	-	-	-	-	14
1,200	1,334	2,534	13,235	9,410	22,645	8.54	15
-	-	-	-	-	-	-	16
-	80	80	-	800	800	10.00	17
620	1,162	1,782	10,465	14,470	24,935	10.00	18
1,210	240	1,450	5,555	650	6,205	8.00	19
220	204	424	1,450	850	2,300	5.00	20
-	66	66	-	660	660	10.00	21
-	-	-	-	-	-	-	22
-	500	500	-	2,500	2,500	5.00	23
8,329	13,343	21,672	\$67,600	\$64,472	\$132,072	-	24
-	-	-	-	-	-	-	25
700	285	985	7,350	2,707	10,057	\$10.00	26
1,469	2,130	3,599	14,155	12,150	26,305	8.00 - 10.00	27
826	130	956	6,725	500	7,225	10.00	28
-	-	-	-	-	-	-	29
144	530	674	800	2,950	3,750	5.00	30
-	-	-	-	-	-	-	31
121	-	121	1,955	-	1,955	-	32
200	250	450	1,700	1,000	2,700	4.00 - 6.00	33
-	-	-	-	-	-	-	34
-	-	-	-	-	-	-	35
700	4,000	4,700	3,500	20,000	23,500	5.00	36
1,050	750	1,800	9,500	3,000	12,500	5.00 - 6.00	37
487	90	577	4,165	400	4,565	-	38
521	1,412	1,933	4,550	6,335	10,885	5.63	39
504	65	569	4,325	200	4,525	8.00	40
-	-	-	-	-	-	-	41
-	-	-	-	-	-	-	42
410	11	421	2,225	80	2,305	5.00	43
500	3,000	3,500	2,500	12,000	14,500	4.50	44
-	-	-	-	-	-	-	45
697	690	1,387	4,150	3,150	7,300	-	46
3,562½	1,308	4,870½	\$94,340	\$23,455	\$117,795	-	47
-	-	-	-	-	-	-	48
-	-	-	-	-	-	-	49
†210	†300	†510	†2,520	†2,100	†4,620	†\$9.00	50
198½	-	198½	8,400	-	8,400	-	51
-	-	-	-	-	-	-	52
65	-	65	1,650	-	1,650	25.40	53
-	-	-	-	-	-	-	54
-	-	-	-	-	-	-	55
-	-	-	-	-	-	-	56
-	-	-	-	-	-	-	57
24	6	30	725	300	1,025	25.00	58
-	-	-	-	-	-	-	59
-	-	-	-	-	-	-	60
-	-	-	-	-	-	-	61
-	-	-	-	-	-	-	62

† Estimated.

*Abandoned Farms in Massachusetts—Continued.*

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms with- out Buildings	Total
MIDDLESEX — Con.				
1	Dracut, . . . . .	-	-	-
2	Dunstable, . . . . .	-	-	-
3	Everett, . . . . .	-	-	-
4	Frammingham, . . . . .	-	-	-
5	Groton, . . . . .	-	-	-
6	Holliston, . . . . .	1	-	1
7	Hopkinton, . . . . .	5	-	5
8	Hudson, . . . . .	1	1	2
9	Lexington, . . . . .	-	-	-
10	Lincoln, . . . . .	-	-	-
11	Littleton, . . . . .	2	-	2
12	Marlborough, . . . . .	4	1	5
13	Maynard, . . . . .	-	-	-
14	Medford, . . . . .	-	-	-
15	Melrose, . . . . .	-	-	-
16	Natick, . . . . .	-	-	-
17	North Reading, . . . . .	1	2	3
18	Pepperell, . . . . .	5	1	6
19	Reading, . . . . .	-	-	-
20	Sherborn, . . . . .	-	-	-
21	Shirley, . . . . .	6	2	8
22	Stoneham, . . . . .	-	-	-
23	Stow, . . . . .	10	9	19
24	Sudbury, . . . . .	2	-	2
25	Tewksbury, . . . . .	-	-	-
26	Townsend, . . . . .	-	-	-
27	Tyngsborough, . . . . .	-	-	-
28	Wakefield, . . . . .	-	-	-
29	Watertown, . . . . .	-	-	-
30	Wayland, . . . . .	2	1	3
31	Westford, . . . . .	1	1	2
32	Weston, . . . . .	-	-	-
33	Wilmington, . . . . .	4	-	4
34	Winchester, . . . . .	-	-	-
NANTUCKET.				
35	Nantucket, . . . . .	-	-	-
NORFOLK.				
36		25	11	36
37	Avon, . . . . .	-	-	-
38	Bellingham, . . . . .	1	2	3
39	Braintree, . . . . .	-	-	-
40	Brookline, . . . . .	-	-	-
41	Canton, . . . . .	-	-	-
42	Cohasset, . . . . .	-	-	-
43	Dedham, . . . . .	-	-	-
44	Dover, . . . . .	-	-	-
45	Foxborough, . . . . .	-	-	-
46	Franklin, . . . . .	1	1	2
47	Holbrook, . . . . .	-	-	-
48	Hyde Park, . . . . .	-	-	-
49	Medfield, . . . . .	-	-	-
50	Medway, . . . . .	-	-	-
51	Millis, . . . . .	2	-	2
52	Milton, . . . . .	-	-	-
53	Needham, . . . . .	2	-	2
54	Norfolk, . . . . .	-	-	-
55	Norwood, . . . . .	1	1	2
56	Randolph, . . . . .	-	-	-
57	Sharon, . . . . .	2	3	5
58	Stoughton, . . . . .	-	-	-
59	Walpole, . . . . .	1	-	1
60	Wellesley, . . . . .	-	-	-
61	Weymouth, . . . . .	-	-	-
62	Wrentham, . . . . .	15	4	19
PLYMOUTH.				
63		24	31	55
64	Abington, . . . . .	-	-	-
65	Bridgewater, . . . . .	3	1	4

*Abandoned Farms in Massachusetts — Continued.*

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	3
-	-	-	-	-	-	-	4
65	-	65	\$1,900	-	\$1,900	\$22.00	5
210	-	210	5,100	-	5,100	20.00	6
38	8	46	550	\$150	700	12.00	7
-	-	-	-	-	-	-	8
-	-	-	-	-	-	-	9
116	-	116	6,650	-	6,650	-	10
346	55	401	7,200	800	8,000	140.00	11
-	-	-	-	-	-	-	12
-	-	-	-	-	-	-	13
-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	15
179½	116	295½	2,765	3,180	5,945	20.00	16
302	30	332	8,825	650	9,475	-	17
-	-	-	-	-	-	-	18
-	-	-	-	-	-	-	19
420	220	640	9,400	3,800	13,200	25.00	20
778	483	1,261	22,370	9,875	32,245	-	21
179	-	179	5,865	-	5,865	20.00	22
-	-	-	-	-	-	-	23
-	-	-	-	-	-	-	24
-	-	-	-	-	-	-	25
-	-	-	-	-	-	-	26
-	-	-	-	-	-	-	27
-	-	-	-	-	-	-	28
35	30	65	1,800	1,000	2,800	40.00	29
125½	60	185½	2,545	1,600	4,145	22.40	30
271	-	271	6,075	-	6,075	-	31
-	-	-	-	-	-	-	32
-	-	-	-	-	-	-	33
-	-	-	-	-	-	-	34
-	-	-	-	-	-	-	35
1,249	738	1,987	\$34,870	\$9,325	\$44,195	-	36
-	-	-	-	-	-	-	37
100	144	244	1,000	1,440	2,440	\$10.00	38
-	-	-	-	-	-	-	39
-	-	-	-	-	-	-	40
-	-	-	-	-	-	-	41
-	-	-	-	-	-	-	42
-	-	-	-	-	-	-	43
-	-	-	-	-	-	-	44
20	55	75	550	250	800	8.00	45
-	-	-	-	-	-	-	46
-	-	-	-	-	-	-	47
-	-	-	-	-	-	-	48
-	-	-	-	-	-	-	49
156	-	156	3,650	-	3,650	15.00	50
100	-	100	9,600	-	9,600	75.00	51
64	85	149	3,695	1,800	5,495	29.00	52
55	165	220	1,375	2,475	3,850	17.50	53
50	-	50	1,200	-	1,200	-	54
-	-	-	-	-	-	-	55
704	289	993	13,800	3,360	17,160	-	56
1,013	1,394	2,407	\$20,822	\$20,446	\$41,268	-	57
-	-	-	-	-	-	-	58
61	40	101	3,080	920	3,980	-	59
-	-	-	-	-	-	-	60
-	-	-	-	-	-	-	61
-	-	-	-	-	-	-	62
-	-	-	-	-	-	-	63
-	-	-	-	-	-	-	64
-	-	-	-	-	-	-	65



*Abandoned Farms in Massachusetts—Continued.*

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms with- out Buildings	Total
PLYMOUTH—Con.				
1	Carver, . . . . .	4	4	8
2	Duxbury, . . . . .	—	—	—
3	East Bridgewater, . . . . .	1	—	1
4	Halifax, . . . . .	8	1	4
5	Hanover, . . . . .	—	—	—
6	Hanson, . . . . .	—	—	—
7	Hingham, . . . . .	—	—	—
8	Hull, . . . . .	—	—	—
9	Kingston, . . . . .	4	—	4
10	Lakeville, . . . . .	—	4	4
11	Marion, . . . . .	—	—	—
12	Marshfield, . . . . .	—	—	—
13	Mattapoisett, . . . . .	—	10	10
14	Middleborough, . . . . .	9	9	18
15	Norwell,* . . . . .	—	—	—
16	Pembroke, . . . . .	—	—	—
17	Plymouth,* . . . . .	—	—	—
18	Plympton, . . . . .	—	2	2
19	Rochester, . . . . .	—	—	—
20	Rockland, . . . . .	—	—	—
21	Scituate, . . . . .	—	—	—
22	Wareham, . . . . .	—	—	—
23	West Bridgewater, . . . . .	—	—	—
24	Whitman, . . . . .	—	—	—
SUFFOLK.				
25		—	—	—
26	Revere, . . . . .	—	—	—
27	Winthrop, . . . . .	—	—	—
WORCESTER.				
28		187	157	344
29	Ashburnham, . . . . .	19	3	22
30	Athol, . . . . .	2	4	6
31	Auburn, . . . . .	—	—	—
32	Barre, . . . . .	18	7	20
33	Berlin, . . . . .	—	—	—
34	Blackstone, . . . . .	—	—	—
35	Bolton, . . . . .	—	—	—
36	Boyleston, . . . . .	3	—	3
37	Brookfield, . . . . .	—	1	1
38	Charlton, . . . . .	8	5	13
39	Clinton, . . . . .	1	—	1
40	Dana, . . . . .	5	5	10
41	Douglas, . . . . .	10	30	40
42	Dudley, . . . . .	3	5	8
43	Gardner, . . . . .	—	—	—
44	Grafton, . . . . .	—	—	—
45	Hardwick, . . . . .	2	5	7
46	Harvard, . . . . .	2	—	2
47	Holden, . . . . .	2	2	4
48	Hopedale, . . . . .	1	—	1
49	Hubbardston, . . . . .	5	6	11
50	Lancaster, . . . . .	—	—	—
51	Leicester, . . . . .	2	4	6
52	Leominster, . . . . .	—	2	2
53	Lunenburg, . . . . .	5	2	7
54	Mendon, . . . . .	3	1	4
55	Millford, . . . . .	—	—	—
56	Millbury, . . . . .	—	—	—
57	New Braintree, . . . . .	1	2	3
58	Northborough, . . . . .	—	—	—
59	Northbridge, . . . . .	—	—	—
60	North Brookfield, . . . . .	1	1	2
61	Oakham, . . . . .	3	2	5
62	Oxford, . . . . .	6	11	17
63	Paxton, . . . . .	8	2	10
64	Petersham, . . . . .	14	7	21
65	Phillipston,* . . . . .	—	—	—

\* No return made.

*Abandoned Farms in Massachusetts — Continued.*

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
103	159	262	\$1,320	\$900	\$2,220	\$6.00	1
14	-	14	350	-	350	-	2
258	61	339	6,692	1,926	8,618	15.00	3
-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	5
-	-	-	-	-	-	-	6
-	-	-	-	-	-	-	7
-	-	-	-	-	-	-	8
230	-	230	3,200	-	3,200	9.00	9
-	162	162	-	1,600	1,600	-	10
-	-	-	-	-	-	-	11
-	-	-	-	-	-	-	12
-	370	370	-	7,140	7,140	5.00 - 100.00	13
347	501	848	6,200	6,700	12,900	10.00	14
-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	16
-	-	-	-	-	-	-	17
-	81	81	-	1,260	1,260	15.00	18
-	-	-	-	-	-	-	19
-	-	-	-	-	-	-	20
-	-	-	-	-	-	-	21
-	-	-	-	-	-	-	22
-	-	-	-	-	-	-	23
-	-	-	-	-	-	-	24
-	-	-	-	-	-	-	25
-	-	-	-	-	-	-	26
-	-	-	-	-	-	-	27
14,979	14,138½	29,117½	\$196,775	\$117,956	\$314,731	-	28
1,874	228	2,102	21,450	3,250	24,700	\$6.00 - \$10.00	29
190	260	450	990	1,040	2,030	5.00	30
-	-	-	-	-	-	-	31
1,311	567	1,878	17,850	7,650	25,500	11.40	32
-	-	-	-	-	-	-	33
-	-	-	-	-	-	-	34
48	-	48	1,290	-	1,290	13.33	35
-	140	140	-	500	500	-	36
906	877	1,283	18,230	5,880	24,110	-	37
98	-	98	4,700	-	4,700	-	38
326	512½	838½	4,050	4,741	8,791	5.00	39
700	1,500	2,200	†7,000	†11,250	†18,250	-	40
427	377	804	7,170	3,700	10,870	15.00	41
-	-	-	-	-	-	-	42
-	-	-	-	-	-	-	43
-	-	-	-	-	-	-	44
160	800	460	1,200	2,000	3,200	5.00 - 8.00	45
200	-	200	2,100	-	2,100	10.00	46
166	259	425	3,300	3,000	6,300	15.00	47
50	-	50	1,800	-	1,800	25.00	48
600	794	1,294	7,100	8,975	16,075	12.00	49
-	-	-	-	-	-	-	50
127	321	448	2,135	3,935	6,070	13.50	51
-	1,462	1,462	-	2,000	2,000	14.00	52
152	49	201	4,210	625	4,835	24.00	53
180	116	296	2,620	1,350	3,970	10.00	54
-	-	-	-	-	-	-	55
-	-	-	-	-	-	-	56
27	268	295	500	2,810	3,310	-	57
-	-	-	-	-	-	-	58
-	-	-	-	-	-	-	59
15	95	110	700	1,700	2,400	14.75	60
223	145	368	2,400	1,000	3,400	-	61
209	779	988	3,800	8,180	11,980	10.00	62
639	266	905	12,125	3,000	15,125	12.27	63
1,217	663	1,880	13,552	4,870	18,422	9.80	64
-	-	-	-	-	-	-	65

† Estimated.

*Abandoned Farms in Massachusetts — Concluded.*

	COUNTIES AND TOWNS.	NUMBER		
		Farms with Buildings	Farms without Buildings	Total
WORCESTER — Con.				
1	Princeton, . . . . .	9	2	11
2	Royalston, . . . . .	14	18	32
3	Rutland, . . . . .	17	5	22
4	Shrewsbury, . . . . .	1	1	2
5	Southborough, . . . . .	—	—	—
6	Southbridge, . . . . .	2	3	5
7	Spencer, . . . . .	—	—	—
8	Sterling, . . . . .	—	—	—
9	Sturbridge, . . . . .	9	4	13
10	Sutton, . . . . .	8	7	15
11	Templeton, . . . . .	—	—	—
12	Upton, . . . . .	3	—	3
13	Uxbridge, . . . . .	1	—	1
14	Warren, . . . . .	—	4	4
15	Webster, . . . . .	—	—	—
16	Westborough, . . . . .	—	—	—
17	West Boylston, . . . . .	—	—	—
18	West Brookfield, . . . . .	1	—	1
19	Westminster, . . . . .	3	2	5
20	Winchendon, . . . . .	—	4	4

## RECAPITULATION.

	THE STATE, AND COUNTIES.	NUMBER		
		Farms with Buildings	Farms without Buildings	Total
1	<b>THE STATE.</b>	772	689	1,461
2	Barnstable, . . . . .	13	2	15
3	Berkshire, . . . . .	120	92	212
4	Bristol, . . . . .	33	19	52
5	Dukes, . . . . .	10	1	11
6	Essex, . . . . .	2	—	2
7	Franklin, . . . . .	113	116	229
8	Hampden, . . . . .	101	112	213
9	Hampshire, . . . . .	92	124	216
10	Middlesex, . . . . .	52	24	76
11	Nantucket, . . . . .	—	—	—
12	Norfolk, . . . . .	25	11	36
13	Plymouth, . . . . .	24	31	55
14	Suffolk, . . . . .	—	—	—
15	Worcester, . . . . .	187	157	344

*Abandoned Farms in Massachusetts — Concluded.*

ACREAGE			ASSESSED VALUATION			Estimated Market Value per Acre of Abandoned Farms	
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total		
778	217	995	\$7,025	\$1,800	\$8,825	\$8.00	1
1,293	1,985	3,278	11,975	11,875	23,850	2.00 - 12.00	2
1,514	400	1,914	16,670	3,350	20,020	3.00 - 15.00	3
74	50	124	700	500	1,200	10.00	4
-	-	-	-	-	-	-	5
305	450	755	3,660	3,600	7,260	14.00	6
-	-	-	-	-	-	-	7
-	-	-	-	-	-	-	8
550	249	899	7,035	2,725	9,760	8.00	9
349	310	659	4,625	4,025	8,650	10.00	10
-	-	-	-	-	-	-	11
186	-	186	*2,413	-	*2,413	-	12
10	-	10	150	-	150	10.00	13
-	510	510	-	6,475	6,475	14.00	14
-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	16
-	-	-	-	-	-	-	17
25	-	25	450	-	450	10.00	18
150	120	270	1,800	1,400	3,200	12.00	19
-	269	269	-	750	750	3.50 - 5.00	20

\* Estimated.

## RECAPITULATION.

ACREAGE			ASSESSED VALUATION			
Farms with Buildings	Farms with- out Buildings	Total	Farms with Buildings	Farms with- out Buildings	Total	
66,650½	59,858½	126,509½	\$690,019	\$386,309	\$1,076,328	1
416	50	466	10,550	500	11,050	2
16,195	11,202	27,397	83,535	45,210	130,745	3
1,663½	558	2,221½	83,240	7,625	40,865	4
607	38	645	6,670	250	6,920	5
114	-	114	2,910	-	2,910	6
8,159	10,617	18,776	65,314	52,120	117,434	7
10,364	6,472	16,836	71,393	44,950	116,343	8
8,329	13,343	21,672	67,600	64,472	132,072	9
3,562½	1,808	4,870½	94,340	23,455	117,795	10
-	-	-	-	-	-	11
1,249	738	1,987	34,870	9,325	44,195	12
1,013	1,394	2,407	20,822	20,446	41,268	13
-	-	-	-	-	-	14
14,979	14,138½	29,117½	196,775	117,956	314,731	15

## ALL FARMS AND ABANDONED FARMS. COMPARATIVE ACREAGE AND VALUE, WITH PERCENTAGES.

COUNTIES AND TOWNS.	Acres of All Farms in 1885	Acres of Abandoned Farms in 1880	Percentages of Acres of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1880	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>BARNSTABLE.</b>	<b>84,344</b>	<b>466</b>	<b>0.55</b>	<b>\$1,657,313</b>	<b>\$11,050</b>	<b>0.67</b>
Barnstable, . . . . .	11,096	-	-	231,447	-	-
Bourne, . . . . .	12,996 <sup>1</sup> / <sub>4</sub>	178	1.37	119,804	2,150	1.79
Brewster, . . . . .	2,045 <sup>3</sup> / <sub>4</sub>	-	-	82,161	-	-
Chatham, . . . . .	1,159 <sup>1</sup> / <sub>4</sub>	-	-	48,120	-	-
Dennis, . . . . .	2,541	-	-	129,413	-	-
Eastham, . . . . .	2,848 <sup>3</sup> / <sub>4</sub>	275	9.65	48,181	7,200	14.94
Falmouth, . . . . .	10,695 <sup>1</sup> / <sub>2</sub>	-	-	213,747	-	-
Harwich, . . . . .	4,919 <sup>1</sup> / <sub>4</sub>	-	-	272,136	-	-
Mashpee, . . . . .	1,913	-	-	17,487	-	-
Orleans, . . . . .	6,159 <sup>1</sup> / <sub>2</sub>	-	-	112,364	-	-
Provincetown, . . . . .	282	-	-	24,200	-	-
Nantwich, . . . . .	18,253 <sup>3</sup> / <sub>4</sub>	13	0.07	126,518	1,700	1.34
Truro, . . . . .	2,198 <sup>3</sup> / <sub>4</sub>	-	-	31,067	-	-
Wellfleet, . . . . .	3,555 <sup>1</sup> / <sub>2</sub>	-	-	40,306	-	-
Yarmouth, . . . . .	3,680 <sup>3</sup> / <sub>4</sub>	-	-	180,362	-	-
<b>BERKSHIRE.</b>	<b>547,689<sup>3</sup>/<sub>4</sub></b>	<b>27,397</b>	<b>5.00</b>	<b>\$10,221,355</b>	<b>\$130,745</b>	<b>1.28</b>
Adams, . . . . .	12,903 <sup>3</sup> / <sub>4</sub>	140	1.08	375,346	600	0.16
Aiford, . . . . .	7,752 <sup>1</sup> / <sub>2</sub>	385	4.97	163,223	4,200	2.57
Becket, . . . . .	26,333 <sup>1</sup> / <sub>2</sub>	4,102	15.58	128,735	17,985	13.97
Cheshire, . . . . .	17,121 <sup>1</sup> / <sub>4</sub>	360	2.10	286,233	1,600	0.56
Clarksburg, . . . . .	8,546 <sup>1</sup> / <sub>2</sub>	-	-	168,752	-	-
Dalton, . . . . .	14,122 <sup>2</sup> / <sub>3</sub>	-	-	250,401	-	-
Egremont, . . . . .	11,437 <sup>1</sup> / <sub>2</sub>	-	-	342,357	-	-
Florida, . . . . .	15,071	601	3.99	103,239	3,610	3.50
Great Barrington, . . . . .	24,037 <sup>1</sup> / <sub>2</sub>	-	-	653,070	-	-
Hancock, . . . . .	18,303 <sup>1</sup> / <sub>4</sub>	370	2.02	248,180	6,000	2.01
Hinsdale, . . . . .	15,089 <sup>1</sup> / <sub>2</sub>	-	-	173,048	-	-
Lanesborough, . . . . .	18,064 <sup>1</sup> / <sub>2</sub>	114	0.63	356,769	500	0.14
Lee, . . . . .	13,267 <sup>1</sup> / <sub>4</sub>	-	-	406,287	-	-
Lenox, . . . . .	12,696 <sup>1</sup> / <sub>4</sub>	-	-	417,548	-	-
Monterey, . . . . .	14,825 <sup>1</sup> / <sub>4</sub>	875	5.90	167,967	6,110	3.64
Mount Washington, . . . . .	12,344	756	6.12	78,716	4,100	6.21
New Ashford, . . . . .	7,722	100	1.30	74,210	500	0.67
New Marlborough, . . . . .	30,129 <sup>1</sup> / <sub>4</sub>	2,856	9.48	499,738	13,020	2.66
North Adams, . . . . .	9,603 <sup>1</sup> / <sub>2</sub>	-	-	324,159	-	-
Otis, . . . . .	21,231 <sup>1</sup> / <sub>2</sub>	4,075	19.19	129,029	10,025	7.77
Peru, . . . . .	13,895 <sup>1</sup> / <sub>2</sub>	2,472	17.79	60,004	9,945	14.29
Pittsfield, . . . . .	22,103 <sup>2</sup> / <sub>3</sub>	-	-	956,504	-	-
Richmond, . . . . .	11,578 <sup>1</sup> / <sub>2</sub>	530	4.53	300,185	10,810	3.60
Sandisfield, . . . . .	31,432 <sup>1</sup> / <sub>2</sub>	2,500	7.95	231,620	8,000	3.45
Savoy, . . . . .	21,235 <sup>1</sup> / <sub>2</sub>	2,869	13.51	88,855	11,555	13.00
Shenfield, . . . . .	28,995 <sup>1</sup> / <sub>2</sub>	-	-	674,039	-	-
Stockbridge, . . . . .	12,412	-	-	815,665	-	-
Tyringham, . . . . .	11,285	-	-	165,895	-	-
Washington, . . . . .	24,125	1,000	4.15	137,305	8,225	5.99
West Stockbridge, . . . . .	10,147 <sup>1</sup> / <sub>2</sub>	-	-	397,110	-	-
Williamstown, . . . . .	26,561	-	-	655,493	-	-
Windsor, . . . . .	23,204 <sup>1</sup> / <sub>2</sub>	3,292	14.19	191,473	14,980	7.81
<b>BRISTOL.</b>	<b>200,633<sup>2</sup>/<sub>3</sub></b>	<b>2,221<sup>1</sup>/<sub>2</sub></b>	<b>1.11</b>	<b>\$5,598,848</b>	<b>\$40,865</b>	<b>0.73</b>
Acushnet, . . . . .	8,945 <sup>1</sup> / <sub>2</sub>	-	-	274,430	-	-
Attleborough*, . . . . .	16,808	74	0.44	508,700	1,250	0.25
Berkley, . . . . .	7,753 <sup>1</sup> / <sub>2</sub>	-	-	207,997	-	-
Dartmouth, . . . . .	28,084 <sup>1</sup> / <sub>2</sub>	-	-	785,366	-	-
Dighton, . . . . .	9,093 <sup>1</sup> / <sub>4</sub>	-	-	290,536	-	-
Easton, . . . . .	11,909	419	3.52	302,520	9,155	3.03
Fairhaven, . . . . .	4,319 <sup>1</sup> / <sub>2</sub>	-	-	201,266	-	-
Freetown, . . . . .	10,153 <sup>3</sup> / <sub>4</sub>	225	2.22	194,477	6,750	3.47
Mansfield, . . . . .	7,694	51 <sup>1</sup> / <sub>2</sub>	0.68	190,466	685	0.36
North Attleborough*, . . . . .	-	-	-	-	-	-
Norton, . . . . .	7,417 <sup>1</sup> / <sub>2</sub>	-	-	137,290	-	-
Raynham, . . . . .	9,101 <sup>1</sup> / <sub>2</sub>	-	-	260,463	-	-
Rehoboth, . . . . .	26,346 <sup>1</sup> / <sub>2</sub>	325	1.23	519,762	4,000	0.77

\* The town of North Attleborough was set off from the town of Attleborough, June 14, 1887. No return made for North Attleborough. See p. 180, ante.

*All Farms and Abandoned Farms. Comparative Acreage and Value, with Percentages — Continued.*

COUNTIES AND TOWNS.	Acreage of All Farms in 1885	Acreage of Abandoned Farms in 1890	Percentages of Acreage of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1890	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>BRISTOL — Con.</b>						
Seekonk, . . .	10,954½	-	-	\$488,387	-	-
Somerset, . . .	4,397½	-	-	345,620	-	-
Swansea, . . .	13,265	297	2.24	454,679	\$4,775	1.05
Westport, . . .	24,505½	830	3.39	436,749	14,250	3.26
<b>DUKES.</b>						
	41,805	645	1.54	\$487,424	\$6,920	1.42
Chilmark, . . .	10,725½	87	0.81	128,706	920	0.71
Cottage City, . . .	1,965½	-	-	32,515	-	-
Edgartown, . . .	8,443½	433	5.13	66,793	4,750	7.11
Gay Head, . . .	1,047½	-	-	8,226	-	-
Gosnold, . . .	8,381	-	-	117,897	-	-
Tisbury, . . .	11,242½	125	1.11	133,287	1,250	0.94
<b>ESSEX.</b>						
	193,999½	114	0.06	\$8,814,938	\$2,910	0.03
Amesbury, . . .	4,149½	-	-	189,446	-	-
Andover, . . .	16,802½	-	-	726,581	-	-
Beverly, . . .	5,512½	-	-	585,991	-	-
Boxford, . . .	12,980½	-	-	354,738	-	-
Bradford, . . .	4,433½	-	-	318,211	-	-
Danvers, . . .	6,538½	-	-	427,344	-	-
Essex, . . .	5,190½	-	-	237,905	-	-
Georgetown, . . .	6,203½	-	-	217,392	-	-
Groveland, . . .	4,734½	64	1.35	151,202	1,680	1.11
Hamilton, . . .	8,346½	-	-	254,904	-	-
Ipawich, . . .	14,625½	-	-	569,646	-	-
Lynnfield, . . .	3,885½	-	-	157,150	-	-
Manchester, . . .	1,712½	-	-	222,450	-	-
Marblehead, . . .	1,265½	-	-	294,223	-	-
Merrimac, . . .	3,671½	-	-	106,718	-	-
Methuen, . . .	10,634½	-	-	518,784	-	-
Middleton, . . .	5,134½	50	0.97	143,518	1,230	0.86
Nahant, . . .	77½	-	-	44,450	-	-
Newbury, . . .	15,093	-	-	597,290	-	-
North Andover, . . .	13,257½	-	-	503,202	-	-
Peabody, . . .	7,220½	-	-	490,000	-	-
Rockport, . . .	1,173	-	-	104,314	-	-
Rowley, . . .	10,211½	-	-	230,021	-	-
Saltabury, . . .	6,239½	-	-	269,057	-	-
Saugus, . . .	2,444½	-	-	147,686	-	-
Swampscott, . . .	531½	-	-	195,933	-	-
Topsfield, . . .	8,720½	-	-	252,683	-	-
Wenham, . . .	4,753½	-	-	191,382	-	-
West Newbury, . . .	7,846	-	-	314,632	-	-
<b>FRANKLIN.</b>						
	383,756½	18,776	4.89	\$6,428,883	\$117,434	1.83
Ashfield, . . .	24,803½	2,050	8.26	251,152	9,800	3.90
Barnardston, . . .	13,657½	450	3.29	223,872	3,500	1.56
Buckland, . . .	11,747½	-	-	183,041	-	-
Charlemont, . . .	15,494½	420	2.71	223,356	1,900	0.85
Colrain,* . . .	-	-	-	-	-	-
Conway, . . .	24,173½	654	2.71	315,549	4,954	1.57
Deerfield, . . .	18,652	-	-	827,286	-	-
Erving, . . .	8,339½	-	-	129,544	-	-
Gill, . . .	9,103½	-	-	271,041	-	-
Greenfield, . . .	11,286½	-	-	493,804	-	-
Hawley, . . .	19,002½	2,629	13.83	109,167	14,460	13.25
Heath, . . .	15,740½	616	3.91	127,980	3,500	2.73
Leverett, . . .	12,658	-	-	182,544	-	-
Leyden, . . .	11,910½	-	-	165,812	-	-
Montague, . . .	6,847½	-	-	63,476	-	-
Monroe, . . .	15,209½	-	-	309,786	-	-
New Salem, . . .	19,688	395	2.01	193,062	5,600	2.90
Northfield, . . .	19,008½	686	3.61	451,604	4,973	1.10
Orange, . . .	19,870½	450	2.27	510,656	2,250	0.44
Rowe, . . .	21,712½	625	2.88	193,487	3,725	3.59
Shelburne, . . .	14,617½	-	-	308,344	-	-

\* No return made. See p. 18, ante.

*All Farms and Abandoned Farms. Comparative Acreage and Value, with Percentages — Continued.*

COUNTIES AND TOWNS.	Acreage of All Farms in 1885	Acreage of Abandoned Farms in 1890	Percentages of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1890	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>FRANKLIN — Con.</b>						
Shutesbury, . . .	14,071	2,563	18.21	\$95,280	\$19,200	20.16
Sunderland, . . .	8,105½	—	—	282,909	—	—
Warwick, . . .	21,512¼	4,041	18.78	179,502	32,045	17.85
Wendell, . . .	17,677	3,100	17.64	123,370	9,950	8.07
Whately, . . .	11,967½	97	0.81	812,819	1,575	0.50
<b>HAMPDEN.</b>	<b>300,736½</b>	<b>16,836</b>	<b>5.60</b>	<b>\$6,183,261</b>	<b>\$116,343</b>	<b>1.88</b>
Agawam, . . .	15,388½	—	—	719,763	—	—
Blandford, . . .	30,245½	3,632	12.07	217,737	19,650	9.02
Brimfield, . . .	21,978¼	1,487	6.77	289,023	10,100	3.49
Chester, . . .	21,783¼	3,000	17.90	174,004	18,663	10.73
Chilcopee, . . .	11,529½	—	—	470,766	—	—
Granville,* . . .	—	—	—	—	—	—
Hampden, . . .	12,624¼	—	—	242,780	—	—
Holland, . . .	6,852½	961	14.02	62,594	7,885	12.60
Longmeadow, . . .	12,381½	—	—	472,944	—	—
Ludlow, . . .	17,411½	—	—	374,683	—	—
Monson, . . .	22,920¾	2,534	11.05	319,384	22,645	7.09
Montgomery, . . .	8,341½	—	—	74,908	—	—
Palmer, . . .	16,905	—	—	312,824	—	—
Russell, . . .	9,480½	80	0.84	67,529	800	1.18
Southwick, . . .	18,242¾	1,782	9.77	200,373	24,935	9.58
Tolland, . . .	17,558½	1,450	8.26	82,297	6,205	7.54
Wales, . . .	7,309¼	424	5.80	62,416	2,300	3.63
Westfield, . . .	27,386¼	66	0.24	962,748	660	0.07
West Springfield, . . .	9,366¼	—	—	640,700	—	—
Wilbraham, . . .	13,346½	500	3.75	375,790	2,500	0.67
<b>HAMPSHIRE.</b>	<b>316,442</b>	<b>21,672</b>	<b>6.85</b>	<b>\$5,800,379</b>	<b>\$132,072</b>	<b>2.28</b>
Amherst, . . .	16,863½	—	—	698,909	—	—
Belchertown, . . .	29,100¾	985	3.38	512,280	10,057	1.96
Chesterfield, . . .	16,184¾	3,699	22.24	146,356	26,305	17.87
Cummington, . . .	15,049¼	956	6.35	151,606	7,225	4.77
Easthampton, . . .	7,484½	—	—	289,081	—	—
Enfield, . . .	9,316½	674	7.23	139,135	3,750	2.70
Goshen, . . .	10,027	—	—	75,397	—	—
Granby, . . .	17,268	121	0.70	379,286	1,955	0.52
Greenwich, . . .	10,898¼	450	4.13	87,061	2,700	3.10
Hadley, . . .	13,325½	—	—	633,115	—	—
Hatfield, . . .	8,629¼	—	—	433,677	—	—
Huntington, . . .	14,625	4,700	32.14	142,288	23,500	16.52
Middlefield, . . .	15,455¼	1,900	11.65	111,244	12,500	11.24
Pelham, . . .	12,675¼	577	4.55	123,210	4,563	3.71
Plainfield, . . .	12,447¼	1,033	15.53	104,357	10,883	10.43
Prescott, . . .	9,110	509	6.25	103,081	4,523	4.39
Southampton, . . .	19,215¼	—	—	329,550	—	—
South Hadley, . . .	9,482¼	—	—	387,514	—	—
Ware, . . .	16,617¼	421	2.53	336,258	2,305	0.69
Westhampton, . . .	15,901½	3,500	22.01	144,203	14,500	10.06
Williamsburg, . . .	14,765½	—	—	269,746	—	—
Worthington, . . .	21,988½	1,387	6.31	214,995	7,300	3.40
<b>MIDDLESEX.</b>	<b>406,533</b>	<b>4,870¼</b>	<b>1.20</b>	<b>\$17,989,032</b>	<b>\$117,795</b>	<b>0.65</b>
Acton, . . .	11,396	—	—	423,463	—	—
Arlington, . . .	1,531¾	—	—	664,300	—	—
Ashby, . . .	14,319¾	1510	3.56	287,459	14,620	1.61
Andover, . . .	7,831¾	198½	2.53	212,847	8,400	3.95
Ayer, . . .	5,168¼	—	—	177,174	—	—
Bedford, . . .	8,099½	65	0.80	302,719	1,650	0.55
Belmont, . . .	1,957	—	—	712,635	—	—
Billerica, . . .	13,442¼	—	—	470,686	—	—
Boxborough, . . .	6,119¼	—	—	167,006	—	—
Burlington, . . .	7,282¼	30	0.41	253,867	1,025	0.40
Carlisle, . . .	9,146½	—	—	216,754	—	—
Chelmsford, . . .	12,078¾	—	—	524,886	—	—

\* No return made. See p. 180, ante.

† Estimated.

*All Farms and Abandoned Farms. Comparative Acreage and Value, with Percentages — Continued.*

COUNTIES AND TOWNS.	Acreage of All Farms in 1886	Acreage of Abandoned Farms in 1880	Percentages of Acreage of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1886	Assessed Value of Abandoned Farms in 1880	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>MIDDLESEX—Con.</b>						
Concord, . . . .	14,425½	-	-	\$667,064	-	-
Dracut, . . . .	11,604½	-	-	723,588	-	-
Dunstable, . . . .	11,236	-	-	199,308	-	-
Everett, . . . .	946½	-	-	466,925	-	-
Frammingham, . . . .	10,663½	-	-	702,945	-	-
Groton, . . . .	17,580½	-	-	690,264	-	-
Holliston, . . . .	10,660½	86	0.61	296,178	\$1,900	0.64
Hopkinton, . . . .	12,391½	210	1.69	256,517	5,100	1.99
Hudson, . . . .	6,487½	46	0.71	276,580	700	0.25
Lexington, . . . .	9,355½	-	-	695,227	-	-
Lincoln, . . . .	9,332½	-	-	430,048	-	-
Littleton, . . . .	11,581½	116	1.00	358,408	6,650	1.86
Marlborough, . . . .	12,811½	401	8.13	613,016	8,000	1.31
Maynard, . . . .	3,229½	-	-	166,251	-	-
Medford, . . . .	1,636½	-	-	482,000	-	-
Melrose, . . . .	866½	-	-	161,975	-	-
Natick, . . . .	8,925½	-	-	339,307	-	-
North Reading, . . . .	7,681½	295½	3.84	241,706	5,945	2.46
Pepperell, . . . .	11,139½	332	2.98	280,697	9,475	3.38
Reading, . . . .	4,780½	-	-	313,229	-	-
Sherborn, . . . .	10,130	-	-	382,747	-	-
Shirley, . . . .	10,096½	640	6.34	258,576	13,200	5.10
Stoneham, . . . .	1,469½	-	-	98,950	-	-
Stow, . . . .	10,160½	1,261	12.41	363,581	32,245	8.87
Sudbury, . . . .	13,483½	179	1.33	482,094	5,865	1.22
Tewksbury, . . . .	12,971½	-	-	627,822	-	-
Townsend, . . . .	14,305½	-	-	308,013	-	-
Tyngsborough, . . . .	8,672½	-	-	198,400	-	-
Wakefield, . . . .	2,462½	-	-	174,252	-	-
Watertown, . . . .	757	-	-	406,500	-	-
Wayland, . . . .	7,893½	65	0.82	320,286	2,800	0.87
Westford, . . . .	18,296½	185½	1.01	424,177	4,145	0.98
Weston, . . . .	11,217½	-	-	546,230	-	-
Wilmington, . . . .	9,573½	271	2.83	253,403	6,075	2.40
Winchester, . . . .	2,307½	-	-	366,974	-	-
<b>NANTUCKET.</b>	8,325	-	-	\$124,228	-	-
Nantucket, . . . .	8,325	-	-	124,228	-	-
<b>NORFOLK.</b>	160,756½	1,987	1.24	\$7,464,743	\$44,195	0.59
Avon,* . . . .	-	-	-	-	-	-
Bellingham, . . . .	7,749½	244	8.15	174,433	2,440	1.40
Braintree, . . . .	5,145½	-	-	308,367	-	-
Brookline, . . . .	938½	-	-	1,042,305	-	-
Canton, . . . .	4,526½	-	-	199,700	-	-
Cohasset, . . . .	4,590	-	-	217,698	-	-
Dedham, . . . .	7,974½	-	-	354,673	-	-
Dover, . . . .	7,276½	-	-	202,890	-	-
Foxborough, . . . .	6,253	-	-	171,700	-	-
Franklin, . . . .	11,466½	75	0.65	290,827	800	0.28
Holbrook, . . . .	2,251½	-	-	77,370	-	-
Hyde Park, . . . .	683½	-	-	92,160	-	-
Medfield, . . . .	7,728½	-	-	208,808	-	-
Medway, . . . .	6,191½	-	-	173,727	-	-
Mills, . . . .	6,614½	156	2.36	174,124	3,650	2.10
Milton, . . . .	3,905½	-	-	788,278	-	-
Needham, . . . .	7,111½	100	1.41	435,551	9,600	2.20
Norfolk, . . . .	8,460½	-	-	160,506	-	-
Norwood, . . . .	3,978	149	3.75	172,395	5,495	3.19
Randolph, . . . .	3,644½	-	-	144,939	-	-
Sharon, . . . .	9,886½	220	2.23	221,313	8,850	1.74
Stoughton,* . . . .	4,924½	-	-	141,796	-	-
Waldpole, . . . .	9,371½	50	0.53	210,911	1,200	0.57
Wellesley, . . . .	5,267½	-	-	702,276	-	-
Weymouth, . . . .	6,670½	-	-	363,431	-	-
Wrentham, . . . .	18,344½	993	5.41	434,575	17,160	3.95

\* The town of Avon was set off from the town of Stoughton, February 21, 1888.



*All Farms and Abandoned Farms. Comparative Acreage and Value, with Percentages—Continued.*

COUNTIES AND TOWNS.	Acreage of All Farms in 1885	Acreage of Abandoned Farms in 1890	Percentages of Acreage of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1890	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>PLYMOUTH.</b>	216,118½	2,407	1.11	\$5,180,840	\$41,268	0.80
Abington, . . . .	3,687	—	—	150,741	—	—
Bridgewater, . . .	9,391½	101	1.08	221,229	3,980	1.80
Carver, . . . . .	20,549½	262	1.27	336,772	2,220	0.66
Duxbury, . . . .	7,632	—	—	192,309	—	—
East Bridgewater, .	4,542½	14	0.31	110,541	350	0.32
Hallifax, . . . .	7,972½	339	4.25	151,866	8,618	5.67
Hanover, . . . . .	6,935½	—	—	202,847	—	—
Hanson, . . . . .	9,315	—	—	237,713	—	—
Hingham, . . . . .	6,691½	—	—	237,507	—	—
Hull, . . . . .	77½	—	—	101,000	—	—
Kingston, . . . .	8,727½	230	2.64	181,671	3,200	1.76
Lakeville, . . . .	15,758½	162	1.03	258,925	1,600	0.62
Marion, . . . . .	4,458½	—	—	112,704	—	—
Marshfield, . . . .	11,663½	—	—	262,761	—	—
Mattapoisett, . . .	6,812½	370	5.43	206,245	7,140	3.46
Middleborough, . .	32,330½	848	2.62	694,862	12,900	1.86
Norwell,* . . . . .	—	—	—	—	—	—
Pembroke, . . . .	10,985½	—	—	223,219	—	—
Plymouth,† . . . .	—	—	—	—	—	—
Plympton, . . . .	7,865½	81	1.03	137,417	1,260	0.92
Rochester, . . . .	15,477½	—	—	244,489	—	—
Rockland, . . . .	2,168	—	—	82,899	—	—
Selkute, . . . . .	6,579½	—	—	304,683	—	—
Wareham, . . . . .	7,443½	—	—	137,310	—	—
West Bridgewater, .	6,250½	—	—	235,095	—	—
Whitman,‡ . . . .	2,803½	—	—	156,035	—	—
<b>SUFFOLK.</b>	1,783½	—	—	\$628,950	—	—
Revere, . . . . .	1,380½	—	—	362,725	—	—
Winthrop, . . . .	403	—	—	266,225	—	—
<b>WORCESTER.</b>	798,890½	29,117½	3.64	\$17,222,883	\$314,731	1.83
Ashburnham, . . .	21,383½	2,102	9.83	293,337	24,700	8.42
Athol, . . . . .	20,411½	450	2.20	397,066	2,030	0.51
Auburn, . . . . .	7,488½	—	—	237,350	—	—
Barre, . . . . .	25,000	1,878	7.51	482,215	25,500	5.29
Berlin, . . . . .	7,765	—	—	206,824	—	—
Blackstone, . . . .	8,419½	—	—	239,878	—	—
Bolton, . . . . .	11,972½	—	—	281,226	—	—
Boylston, . . . . .	9,765½	48	0.49	227,269	1,290	0.57
Brookfield, . . . .	14,267½	140	0.98	364,327	500	0.14
Charlton, . . . . .	25,461½	1,283	5.04	653,495	24,110	4.36
Clinton, . . . . .	2,184½	98	4.49	76,275	4,700	6.16
Dana, . . . . .	11,591½	838½	7.23	117,270	8,791	7.50
Douglas, . . . . .	18,015½	2,200	12.21	213,184	\$18,250	8.56
Dudley, . . . . .	13,686½	804	5.87	262,473	10,870	4.14
Gardner, . . . . .	9,890½	—	—	223,618	—	—
Grafton, . . . . .	14,003½	—	—	453,095	—	—
Hardwick, . . . . .	23,217½	460	1.98	395,507	3,200	0.88
Harvard, . . . . .	17,702½	200	1.12	481,886	2,100	0.44
Holden, . . . . .	19,982	425	2.13	344,731	6,300	1.83
Hopedale,   . . . .	—	50	—	—	1,800	—
Hubbardston, . . .	24,627½	1,294	5.25	353,016	16,075	4.55
Leicester, . . . . .	14,010½	—	—	387,630	—	—
Leicester, . . . . .	12,973½	448	3.45	400,986	6,070	1.51
Leominster, . . . .	16,244½	1,462	8.98	659,808	2,000	0.36
Lunenburg, . . . .	16,978½	201	1.18	499,170	4,835	0.97
Mendon, . . . . .	11,105½	296	2.67	284,338	3,970	1.40
Milford,   . . . .	8,722½	—	—	200,324	—	—
Millbury, . . . . .	8,717	—	—	249,372	—	—

\* Name changed from South Selkute, by Act of February 27, 1888. Accepted by the town, March 5, 1888. No return made. See p. 180, ante.

† No return made. See p. 180, ante.

‡ Name changed from South Abington, by Act of March 5, 1886. Accepted by the town, May 3, 1886.

§ Estimated.

|| The town of Hopedale was set off from the town of Milford, April 7, 1886.

*All Farms and Abandoned Farms. Comparative Acreage and Value, with Percentages — Concluded.*

COUNTIES AND TOWNS.	Acreage of All Farms in 1885	Acreage of Abandoned Farms in 1890	Percentages of Acreage of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1890	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>WORCESTER—Con.</b>						
New Braintree, . . .	13,294	295	2.22	\$259,437	\$3,310	1.23
Northborough, . . .	10,131½	—	—	325,137	—	—
Northbridge, . . .	7,726½	—	—	189,165	—	—
North Brookfield, . . .	11,952	110	0.92	304,574	2,400	0.79
Oakham, . . .	11,848½	368	3.11	183,629	3,400	2.08
Oxford, . . .	14,397½	988	6.86	314,327	11,980	3.81
Faxton, . . .	9,290	905	9.74	151,923	15,125	9.96
Petersham, . . .	24,152	1,880	7.78	355,132	18,422	5.19
Phillipston,* . . .	—	—	—	—	—	—
Princeton, . . .	20,926½	995	4.75	402,990	8,825	2.19
Royalston, . . .	25,332	3,278	12.94	313,358	23,850	7.49
Rutland, . . .	22,246½	1,914	8.60	296,527	20,020	6.99
Shrewsbury, . . .	10,815½	124	1.15	379,290	1,200	0.32
Southborough, . . .	9,900½	—	—	472,816	—	—
Southbridge, . . .	10,350½	755	7.29	189,060	7,260	3.83
Spencer, . . .	19,308½	—	—	640,141	—	—
Sterling, . . .	18,412	—	—	519,177	—	—
Sturbridge, . . .	19,111½	899	4.70	262,930	9,760	3.71
Sutton, . . .	15,410½	659	4.23	352,072	8,650	2.46
Templeton, . . .	14,206½	—	—	210,085	—	—
Upton, . . .	10,508½	186	1.77	203,011	12,413	1.16
Uxbridge, . . .	17,028½	10	0.06	386,666	150	0.04
Warren, . . .	15,214½	610	3.35	283,835	6,475	2.23
Webster, . . .	6,663½	—	—	144,828	—	—
Westborough, . . .	11,958½	—	—	402,735	—	—
West Boylston, . . .	6,341½	—	—	210,900	—	—
West Brookfield, . . .	12,360½	25	0.20	258,283	450	0.17
Westminster, . . .	16,363½	270	1.65	340,917	3,200	0.94
Winchendon, . . .	18,031½	209	1.49	244,105	750	0.31

\* No return made. See p. 180, ante.

† Estimated.

**RECAPITULATION.**

THE STATE, AND COUNTIES.	Acreage of All Farms in 1885	Acreage of Abandoned Farms in 1890	Percentages of Acreage of Abandoned Farms of Acreage of All Farms	Value of All Farm Land in 1885	Assessed Value of Abandoned Farms in 1890	Percentages of Assessed Value of Abandoned Farms of Value of All Farm Land
<b>THE STATE.</b>	3,661,833½	126,509½	3.45	\$93,803,077	\$1,076,328	1.15
Barnstable, . . .	84,344	466	0.55	1,637,313	11,050	0.67
Berkshire, . . .	547,689½	27,397	5.00	10,221,355	130,745	1.23
Bristol, . . .	200,653½	2,221½	1.11	5,598,848	40,865	0.73
Dukes, . . .	41,805	645	1.54	487,424	6,929	1.42
Essex, . . .	193,999½	114	0.06	8,814,938	2,910	0.03
Franklin, . . .	383,756½	18,776	4.89	6,428,883	117,434	1.83
Hampden, . . .	300,738½	16,836	5.60	6,133,261	116,343	1.88
Hampshire, . . .	316,442	21,672	6.85	5,800,379	132,072	2.23
Middlesex, . . .	406,533	4,870½	1.20	17,989,032	117,795	0.65
Nantucket, . . .	8,325	—	—	124,228	—	—
Norfolk, . . .	160,756½	1,987	1.24	7,464,743	44,195	0.59
Plymouth, . . .	216,118½	2,407	1.11	5,180,840	41,268	0.80
Suffolk, . . .	1,783½	—	—	623,950	—	—
Worcester, . . .	798,890½	29,117½	3.64	17,222,883	314,731	1.83

**COMPARATIVE VALUES OF AGRICULTURAL PRODUCTS AND PROPERTY.  
FROM THE CENSUSES OF 1875 AND 1885. GOLD VALUES.**

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
<b>BARNSTABLE.</b>	<b>\$552,476</b>	<b>\$950,175</b>	<b>+ \$397,699</b>	<b>+71.98</b>
Barnstable, . . . . .	69,326	177,282	+107,956	+155.69
Bourne,* . . . . .	-	71,159	+71,159	-
Brewster, . . . . .	18,896	19,921	+1,025	+5.42
Chatham, . . . . .	23,707	18,186	-5,521	-23.50
Dennis, . . . . .	42,287	54,787	+12,480	+29.51
Eastham, . . . . .	40,436	54,098	+13,662	+33.79
Falmouth, . . . . .	67,846	99,901	+32,055	+47.25
Harwich, . . . . .	42,505	132,570	+90,065	+211.89
Mashpee, . . . . .	4,904	15,250	+10,346	+272.15
Orleans, . . . . .	46,803	96,106	+49,303	+105.34
Provincetown, . . . . .	4,911	19,560	+14,649	+298.29
Sandwich,* . . . . .	108,760	70,804	-37,946	-34.89
Truro, . . . . .	20,928	38,399	+17,471	+83.48
Wellfleet, . . . . .	21,457	44,289	+22,832	+106.41
Yarmouth, . . . . .	39,720	34,963	-4,757	-12.00
<b>BERKSHIRE.</b>	<b>\$3,288,490</b>	<b>\$4,400,025</b>	<b>+ \$1,131,535</b>	<b>+34.62</b>
Adams, †. . . . .	169,486	154,017	-15,469	-9.13
Alford, . . . . .	59,072	68,907	+9,835	+16.65
Becket, . . . . .	99,389	98,096	-1,294	-1.30
Cheshire, . . . . .	95,581	174,343	+78,762	+82.40
Clarksburg, . . . . .	43,938	67,969	+24,031	+54.69
Dalton, . . . . .	100,479	118,074	+17,595	+17.51
Egremont, . . . . .	122,269	134,694	+12,395	+10.13
Florida, . . . . .	48,105	88,737	+40,632	+82.47
Great Barrington, . . . . .	167,968	289,070	+121,102	+72.10
Hancock, . . . . .	74,654	74,407	-247	-0.33
Hinsdale, . . . . .	98,404	104,737	+6,333	+6.44
Lanesborough, . . . . .	119,387	148,011	+28,624	+23.98
Lee, . . . . .	102,655	166,872	+64,217	+62.56
Lenox, . . . . .	94,793	172,433	+77,640	+81.90
Monterey, . . . . .	95,450	96,668	+1,218	+1.28
Mount Washington, . . . . .	20,546	21,753	+1,207	+5.87
New Ashford, . . . . .	27,495	32,087	+4,592	+16.70
New Marlborough, . . . . .	237,388	275,537	+38,149	+16.07
North Adams, †. . . . .	-	121,467	+121,467	-
Otis, . . . . .	51,946	79,554	+27,608	+53.15
Perru, . . . . .	46,607	60,161	+13,554	+29.08
Pittsfield, . . . . .	290,792	351,957	+61,165	+21.03
Richmond, . . . . .	76,838	119,244	+42,406	+55.19
Sandisfield, . . . . .	117,610	157,846	+40,236	+34.21
Savoy, . . . . .	93,520	88,941	-4,579	-4.90
Sheffield, . . . . .	240,721	253,927	+13,206	+5.49
Stockbridge, . . . . .	93,642	182,078	+88,436	+94.44
Tyringham, . . . . .	67,502	68,327	+825	+1.22
Washington, . . . . .	83,505	89,691	+6,186	+7.41
West Stockbridge, . . . . .	74,453	133,681	+59,228	+79.55
Williamstown, . . . . .	172,602	285,489	+112,887	+65.39
Windsor, . . . . .	83,663	121,271	+37,608	+44.95
<b>BRISTOL.</b>	<b>\$2,127,087</b>	<b>\$3,012,809</b>	<b>+ \$885,722</b>	<b>+41.64</b>
Acushnet, . . . . .	90,876	128,657	+37,781	+41.57
Attleborough, . . . . .	176,126	309,331	+133,205	+75.63
Berkley, . . . . .	70,382	116,209	+45,827	+65.11
Dartmouth, . . . . .	399,602	362,407	-37,195	-9.31
Dighton, . . . . .	110,120	179,182	+69,062	+62.72
Easton, . . . . .	90,160	137,112	+46,952	+52.08
Fairhaven, . . . . .	53,784	117,414	+63,630	+118.31
Freetown, . . . . .	82,038	83,787	+1,749	+2.13
Mansfield, . . . . .	48,541	140,266	+91,725	+188.96
Norton, . . . . .	47,106	65,424	+18,318	+38.89
Raynham, . . . . .	64,996	116,533	+51,537	+77.10

\* The town of Bourne was set off from the town of Sandwich, April 2, 1884. See explanation, p. 212, *post*.

† See note on p. 201.

COMPARATIVE VALUES OF AGRICULTURAL PRODUCTS AND PROPERTY.  
FROM THE CENSUSES OF 1875 AND 1885. GOLD VALUES.

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
<b>BARNSTABLE.</b>	<b>\$1,695,965</b>	<b>\$3,439,733</b>	<b>+\$1,743,768</b>	<b>+102.82</b>
Barnstable, . . . . .	117,975	601,083	+483,108	+409.50
Bourne,* . . . . .	-	184,202	+184,202	-
Brewster, . . . . .	30,115	95,098	+65,583	+217.78
Chatham, . . . . .	63,992	61,582	-2,590	-51.10
Dennis, . . . . .	108,176	201,822	+93,616	+86.57
Eastham, . . . . .	125,104	135,422	+10,318	+8.25
Falmouth, . . . . .	299,752	515,653	+215,901	+72.03
Harwich, . . . . .	37,610	435,236	+397,626	+1,057.23
Mashpee, . . . . .	12,864	27,097	+14,233	+110.64
Orleans, . . . . .	152,261	395,732	+243,471	+159.90
Provincetown, . . . . .	-	33,410	+33,410	-
Sandwich,* . . . . .	539,731	279,729	-260,002	-48.17
Truro, . . . . .	45,639	88,922	+43,283	+94.84
Wellfleet, . . . . .	-	134,998	+134,998	-
Yarmouth, . . . . .	172,746	225,147	+52,401	+30.33
<b>BERKSHIRE.</b>	<b>\$15,990,619</b>	<b>\$20,299,569</b>	<b>+\$4,299,950</b>	<b>+26.89</b>
Adams,† . . . . .	874,380	626,561	-247,819	-28.34
Alford, . . . . .	239,851	326,192	+86,341	+36.00
Becket, . . . . .	333,688	300,070	-33,618	-10.07
Cheshire, . . . . .	423,122	575,052	+151,930	+35.91
Clarksburg, . . . . .	233,533	266,832	+33,299	+14.26
Dalton, . . . . .	489,383	484,056	-5,327	-1.09
Egremont, . . . . .	608,182	663,021	+54,839	+30.47
Florida, . . . . .	191,320	212,857	+21,537	+11.26
Great Barrington, . . . . .	948,649	1,698,693	+750,044	+79.06
Hancock, . . . . .	445,440	433,284	-12,156	-2.73
Hinsdale, . . . . .	477,899	415,168	-62,731	-13.13
Lanesborough, . . . . .	529,661	633,228	+103,567	+19.55
Lee, . . . . .	672,490	880,426	+207,936	+33.79
Lenox, . . . . .	665,063	1,216,572	+551,509	+115.30
Monterey, . . . . .	330,837	349,070	+18,233	+5.51
Mount Washington, . . . . .	161,417	132,943	-28,474	-17.64
New Ashford, . . . . .	85,672	131,800	+46,128	+53.84
New Marlborough, . . . . .	1,135,614	1,081,028	-54,586	-4.80
North Adams,† . . . . .	-	548,025	+548,025	-
Otis, . . . . .	237,616	284,997	+47,381	+19.94
Peru, . . . . .	167,048	165,150	-1,898	-1.14
Plattsfield, . . . . .	1,666,817	1,817,366	+150,549	+9.03
Richmond, . . . . .	465,825	550,791	+84,966	+18.36
Sandisfield, . . . . .	410,581	567,301	+156,720	+38.17
Savoy, . . . . .	269,468	192,888	-76,580	-28.42
Sheffield, . . . . .	1,207,130	1,245,164	+38,034	+3.15
Stockbridge, . . . . .	688,208	1,606,061	+917,853	+133.38
Tyringham, . . . . .	260,501	335,998	+75,497	+28.96
Washington, . . . . .	247,763	255,091	+7,328	+3.20
West Stockbridge, . . . . .	510,419	734,910	+224,491	+43.98
Williamstown, . . . . .	875,751	1,175,456	+299,685	+34.22
Windsor, . . . . .	237,391	403,078	+165,687	+69.79
<b>BRISTOL.</b>	<b>\$9,297,763</b>	<b>\$12,249,294</b>	<b>+\$2,951,531</b>	<b>+31.74</b>
Acushnet, . . . . .	412,471	625,139	+212,668	+51.56
Attleborough, . . . . .	898,598	1,233,187	+334,589	+38.78
Berkley, . . . . .	300,843	590,005	+289,162	+93.09
Dartmouth, . . . . .	1,599,307	1,610,208	+10,901	+0.68
Dighton, . . . . .	390,479	710,807	+320,328	+82.03
Easton, . . . . .	324,910	590,082	+265,172	+81.61
Fairhaven, . . . . .	246,724	457,358	+210,634	+85.37
Freetown, . . . . .	346,479	431,426	+84,947	+24.52
Marblehead, . . . . .	307,846	450,726	+142,880	+46.41
Norton, . . . . .	282,958	270,958	-12,000	-4.24
Raynham, . . . . .	526,429	521,455	-4,974	-0.94

\* See note on p. 200.

† The town of North Adams was set off from the town of Adams, April 16, 1878. See explanation, p. 212, *post*.

*Comparative Values of Agricultural Products and Property — Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
BRISTOL — Con.				
Rehoboth, . . . . .	\$202,821	\$301,365	+ \$98,544	+48.59
Seekonk, . . . . .	128,704	228,599	+99,895	+77.62
Somerset, . . . . .	86,046	139,441	+53,395	+62.05
Swansea, . . . . .	155,219	218,526	+63,307	+40.11
Westport, . . . . .	300,566	338,556	+37,990	+12.64
DUKES.				
	\$133,141	\$211,320	+ \$78,179	+58.72
Chilmark, . . . . .	40,019	46,522	+6,503	+16.25
Cottage City,* . . . . .	-	23,391	+23,391	-
Edgartown,* . . . . .	38,641	50,305	+11,664	+30.19
Gay Head, . . . . .	4,773	4,801	+28	+0.59
Gosnold, . . . . .	4,554	8,932	+4,378	+96.14
Tisbury, . . . . .	45,154	77,369	+32,215	+71.34
ESSEX.				
	\$2,570,352	\$3,801,401	+ \$1,231,049	+47.89
Amesbury, . . . . .	51,204	72,624	+21,420	+41.83
Andover, . . . . .	130,200	300,957	+170,757	+131.15
Beverly, . . . . .	54,787	206,111	+151,324	+276.20
Boxford, . . . . .	91,713	114,695	+22,982	+25.06
Bradford, . . . . .	34,960	108,294	+69,334	+177.96
Danvers, . . . . .	150,143	266,319	+116,206	+77.40
Essex, . . . . .	80,263	112,456	+32,193	+40.11
Georgetown, . . . . .	45,879	94,796	+48,917	+106.62
Groveland, . . . . .	68,814	68,281	-533	-0.77
Hamilton, . . . . .	69,075	106,121	+37,046	+53.63
Ipswich, . . . . .	217,508	243,905	+26,397	+12.14
Lynnfield, . . . . .	62,251	91,166	+28,915	+46.45
Manchester, . . . . .	20,089	45,457	+25,368	+126.28
Marblehead, . . . . .	110,260	88,263	-21,997	-19.95
Merrimac, . . . . .	43,948	44,084	+136	+0.31
Methuen, . . . . .	206,073	259,243	+53,170	+25.80
Middleton, . . . . .	53,806	77,783	+23,987	+44.32
Nahant,† . . . . .	-	11,690	+11,690	-
Newbury, . . . . .	210,887	276,868	+65,981	+31.29
North Andover, . . . . .	144,572	197,093	+52,520	+36.33
Peabody, . . . . .	104,874	228,305	+123,431	+117.69
Peabody, . . . . .	22,523	48,634	+26,111	+115.93
Rowley, . . . . .	98,008	114,443	+16,347	+16.66
Salisbury, . . . . .	107,131	103,176	-3,955	-3.69
Saugus, . . . . .	41,209	83,397	+42,188	+102.39
Swampscott, . . . . .	32,653	25,809	-7,844	-23.31
Topshfield, . . . . .	94,850	140,551	+45,701	+48.18
Wenham, . . . . .	48,042	81,861	+33,819	+70.39
West Newbury, . . . . .	169,452	183,984	+14,532	+8.58
FRANKLIN.				
	\$2,875,563	\$3,752,711	+ \$877,148	+30.50
Ashfield, . . . . .	127,505	231,894	+104,389	+81.87
Barnardston, . . . . .	102,201	132,981	+30,780	+30.12
Buckland, . . . . .	97,107	143,671	+46,564	+47.95
Charlemont, . . . . .	104,104	147,400	+43,296	+41.59
Colrain,† . . . . .	-	-	-	-
Conway, . . . . .	210,086	266,556	+56,470	+26.88
Deerfield, . . . . .	364,880	428,381	+63,501	+17.40
Erving, . . . . .	30,545	30,589	+44	+0.14
Gill, . . . . .	132,454	140,733	+8,279	+6.23
Greenfield, . . . . .	151,330	253,335	+102,005	+67.41
Hawley, . . . . .	63,660	102,639	+38,979	+61.23
Heath, . . . . .	77,200	110,279	+33,079	+42.85
Leverett, . . . . .	75,134	108,573	+33,439	+44.61
Leyden, . . . . .	85,054	94,855	+9,801	+11.52
Monroe, . . . . .	20,599	25,018	+4,419	+21.45
Montague, . . . . .	155,970	181,637	+25,667	+16.46
New Salem, . . . . .	79,925	102,240	+22,315	+27.92

\* The town of Cottage City was set off from the town of Edgartown, February 17, 1880. See explanation, p. 212, *post*.

† No return made in 1875.

‡ No return made. See p. 180, *ante*.

*Comparative Values of Agricultural Products and Property—Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
BRISTOL—Con.				
Rehoboth, . . . . .	\$830,355	\$1,116,742	+\$286,387	+34.49
Seekonk, . . . . .	681,490	983,635	+302,145	+44.34
Somerset, . . . . .	451,310	659,534	+208,224	+46.14
Swansea, . . . . .	628,588	960,578	+331,990	+52.82
Westport, . . . . .	1,078,976	1,046,554	-32,422	-3.00
DUKES.				
	\$713,645	\$1,020,120	+\$306,475	+42.95
Chilmark, . . . . .	201,861	252,729	+50,868	+25.20
Cottage City,* . . . . .	-	78,197	+78,197	-
Edgartown,* . . . . .	190,573	161,694	-28,879	-15.15
Gay Head, . . . . .	17,339	23,407	+6,068	+34.99
Gosnold, . . . . .	94,599	152,116	+57,517	+60.80
Tisbury, . . . . .	209,273	351,977	+142,704	+68.19
ESSEX.				
	\$12,302,836	\$17,853,057	+\$5,550,221	+45.11
Amesbury, . . . . .	246,141	376,556	+130,415	+52.98
Andover, . . . . .	583,162	1,335,766	+752,604	+129.06
Beverly, . . . . .	355,457	1,278,080	+922,603	+259.55
Boxford, . . . . .	428,538	640,332	+211,794	+49.42
Bradford, . . . . .	269,728	664,863	+415,135	+153.91
Danvers, . . . . .	697,996	937,207	+239,211	+34.27
Essex, . . . . .	374,752	433,573	+68,821	+17.03
Georgetown, . . . . .	287,182	533,126	+245,944	+85.64
Groveland, . . . . .	348,783	370,712	+21,929	+6.29
Hamilton, . . . . .	407,947	586,649	+178,702	+43.81
Ipswich, . . . . .	1,057,367	1,261,815	+204,448	+19.34
Lynnfield, . . . . .	300,695	304,322	+3,627	+1.21
Manchester, . . . . .	135,535	488,659	+353,124	+260.54
Marblehead, . . . . .	532,716	478,044	-54,672	-10.26
Merrimac, . . . . .	172,476	225,583	+53,107	+30.79
Methuen, . . . . .	932,936	1,042,212	+109,276	+11.71
Middleton, . . . . .	823,721	278,611	-54,110	-13.93
Nahant,* . . . . .	-	64,384	+64,384	-
Newbury, . . . . .	790,227	1,170,123	+379,896	+48.07
North Andover, . . . . .	623,696	920,417	+296,721	+46.40
Peabody, . . . . .	458,713	959,226	+500,513	+109.11
Rockport, . . . . .	149,161	235,128	+85,967	+57.63
Rowley, . . . . .	422,387	514,299	+91,912	+21.76
Salisbury, . . . . .	485,740	489,663	+3,923	+0.81
Saugus, . . . . .	166,512	279,977	+113,465	+68.14
Swampscott, . . . . .	421,375	257,216	-164,159	-38.96
Topsfield, . . . . .	468,496	538,683	+70,187	+14.98
Wenham, . . . . .	224,631	444,631	+220,000	+97.94
West Newbury, . . . . .	631,766	718,220	+86,454	+13.68
FRANKLIN.				
	\$11,479,388	\$12,953,774	+\$1,474,386	+12.84
Ashfield, . . . . .	517,793	610,773	+92,980	+17.96
Barnardston, . . . . .	474,064	527,364	+53,300	+10.68
Buckland, . . . . .	411,143	422,262	+11,119	+2.70
Charlemont, . . . . .	508,354	486,837	-21,517	-4.22
Colrain,* . . . . .	-	-	-	-
Conway, . . . . .	674,855	689,331	+14,476	+2.15
Deerfield, . . . . .	1,429,370	1,601,927	+172,557	+12.07
Erving, . . . . .	126,509	188,226	+61,717	+48.68
Gill, . . . . .	485,876	511,086	+25,210	+5.19
Greenfield, . . . . .	836,802	882,767	+45,965	+5.49
Hawley, . . . . .	233,310	257,465	+24,155	+10.36
Heath, . . . . .	221,438	329,042	+107,604	+48.17
Leverett, . . . . .	315,938	382,387	+66,449	+21.03
Leyden, . . . . .	301,363	330,298	+28,935	+9.60
Monroe, . . . . .	60,763	97,434	+36,671	+60.35
Montague, . . . . .	651,215	610,371	-40,844	-6.27
New Salem, . . . . .	274,192	387,530	+113,338	+41.34

\* See notes on p. 202.

*Comparative Values of Agricultural Products and Property—Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1873	Census of 1883	INCREASE (+), OR DECREASE (-), IN 1883	
			Values	Percentages
FRANKLIN—Con.				
Northfield, . . . . .	\$238,412	\$217,967	—\$20,445	—8.58
Orange, . . . . .	75,817	193,861	+118,044	+155.70
Rowe, . . . . .	63,179	69,065	+5,886	+9.32
Shelburne, . . . . .	147,271	190,300	+43,029	+29.22
Shutesbury, . . . . .	49,055	44,145	—4,910	—10.01
Sunderland, . . . . .	164,750	197,398	+32,648	+19.82
Warwick, . . . . .	64,255	90,523	+26,273	+40.89
Wendell, . . . . .	41,076	49,707	+8,631	+21.01
Whately, . . . . .	153,994	198,959	+44,965	+29.20
HAMPDEN.				
	\$2,661,225	\$3,013,099	+\$351,874	+13.22
Agawam, . . . . .	280,396	345,294	+64,898	+23.15
Blandford, . . . . .	146,300	156,059	+9,759	+6.67
Brimfield, . . . . .	151,163	161,303	+10,140	+6.71
Chester, . . . . .	92,921	105,304	+12,383	+13.33
Chicopee, . . . . .	191,785	193,323	+1,538	+0.80
Granville,* . . . . .	—	—	—	—
Hampden,† . . . . .	—	118,189	+118,189	—
Holland, . . . . .	29,514	34,867	+5,353	+18.14
Longmeadow, . . . . .	209,228	193,729	—15,499	—7.41
Ludlow, . . . . .	133,729	203,089	+69,310	+51.83
Monson, . . . . .	189,616	200,854	+11,238	+5.93
Montgomery, . . . . .	48,510	57,304	+8,794	+18.13
Palmer, . . . . .	145,957	161,572	+15,615	+10.70
Russell, . . . . .	30,579	44,433	+13,854	+45.31
Southwick, . . . . .	203,532	134,431	—69,101	—33.95
Tolland, . . . . .	56,088	61,752	+5,664	+10.10
Wales, . . . . .	43,748	39,810	—3,938	—9.00
Westfield, . . . . .	324,018	446,093	+122,075	+37.68
West Springfield, . . . . .	125,267	211,925	+86,658	+69.18
Wilbraham,† . . . . .	258,874	143,818	—115,056	—44.44
HAMPSHIRE.				
	\$3,120,108	\$3,497,865	+\$377,757	+12.11
Amherst, . . . . .	235,647	400,820	+165,173	+70.09
Belchertown, . . . . .	271,087	330,681	+59,594	+21.98
Chesterfield, . . . . .	75,559	105,502	+29,943	+39.63
Cummington, . . . . .	95,817	91,009	—4,808	—4.52
Easthampton, . . . . .	119,756	154,038	+34,282	+28.63
Enfield, . . . . .	99,422	75,118	—24,304	—24.45
Goshen, . . . . .	46,325	57,678	+11,353	+24.51
Granby, . . . . .	171,264	196,357	+25,093	+14.65
Greenwich, . . . . .	65,687	62,441	—3,246	—4.94
Hadley, . . . . .	430,778	389,840	—40,938	—11.36
Hatfield, . . . . .	369,130	278,568	—90,562	—25.89
Huntington, . . . . .	74,480	98,764	+24,284	+32.60
Middlefield, . . . . .	57,006	71,675	+13,769	+23.78
Pelham, . . . . .	51,119	77,871	+26,752	+52.33
Plainfield, . . . . .	66,424	72,272	+5,848	+8.80
Priscott, . . . . .	63,931	63,992	+61	+0.09
South Hadley, . . . . .	164,863	208,683	+43,820	+26.58
Southampton, . . . . .	146,583	215,256	+68,673	+46.85
Ware, . . . . .	171,753	191,680	+19,927	+11.60
Westhampton, . . . . .	102,497	97,046	—5,451	—4.44
Williamsburg, . . . . .	97,001	130,280	+33,279	+34.31
Worthington, . . . . .	44,579	132,394	+87,815	+196.83
MIDDLESEX.				
	\$5,527,389	\$7,114,648	+\$1,587,259	+28.72
Acton, . . . . .	152,960	209,633	+56,673	+37.05
Arlington, . . . . .	315,818	334,470	+18,652	+5.90
Ashby, . . . . .	123,568	133,004	+9,436	+7.64
Ashland, . . . . .	59,282	80,004	+20,722	+34.97
Ayer, . . . . .	46,924	46,664	—260	—0.55
Bedford, . . . . .	104,595	139,023	+34,428	+32.92
Belmont, . . . . .	184,022	243,156	+59,134	+31.70
Billerica, . . . . .	134,511	201,737	+67,226	+49.98

\* No return made. See p. 180, ante.

† The town of Hampden was set off from the town of Wilbraham, March 28, 1878. See explanation, p. 212, post.

*Comparative Values of Agricultural Products and Property—Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
FRANKLIN—Con.				
Northfield,	\$990,846	\$963,176	-\$27,670	-2.79
Orange,	476,454	901,333	+424,879	+89.18
Rowe,	234,554	246,997	+12,443	+5.30
Shelburne,	478,100	621,642	+143,542	+30.02
Shutesbury,	157,480	167,907	+10,427	+6.62
Sunderland,	584,493	569,861	-14,632	-2.50
Warwick,	223,192	308,741	+85,549	+38.33
Wendell,	117,920	220,094	+102,174	+86.65
Whately,	682,674	640,923	-41,751	-6.12
HAMPDEN.				
	\$10,847,086	\$12,332,792	+\$1,485,706	+13.70
Agawam,	695,011	1,423,206	+743,195	+108.49
Blandford,	610,341	495,188	-115,153	-18.87
Brimfield,	562,390	725,010	+162,620	+28.92
Chester,	351,248	380,763	+29,515	+8.40
Chicopee,	1,018,235	911,727	-106,508	-10.46
Granville,*	-	-	-	-
Hampden,*	-	525,608	+525,608	-
Holland,	121,000	136,141	+15,141	+12.51
Longmeadow,	968,531	925,794	-42,737	-4.41
Ludlow,	545,504	693,233	+147,729	+27.08
Monson,	568,204	626,053	+57,849	+10.18
Montgomery,	153,405	173,639	+20,234	+13.19
Palmer,	592,886	664,666	+71,810	+12.11
Russell,	150,273	162,695	+12,422	+8.27
Southwick,	672,186	530,469	-141,717	-21.08
Tolland,	175,182	181,664	+6,482	+3.70
Wales,	226,851	153,800	-73,051	-32.20
Westfield,	1,373,734	1,744,745	+371,011	+27.01
West Springfield,	998,042	1,183,697	+185,655	+18.59
Wilbraham,*	1,074,063	739,664	-334,399	-31.13
HAMPSHIRE.				
	\$11,671,503	\$12,688,188	+\$1,016,685	+8.71
Amherst,	1,230,262	1,463,505	+224,243	+18.09
Belchertown,	884,645	1,306,443	+421,798	+47.68
Chesterfield,	318,093	360,977	+42,884	+13.48
Cummington,	342,034	347,468	+5,434	+1.59
Easthampton,	709,627	628,850	-80,777	-11.38
Enfield,	328,003	308,299	-20,604	-6.26
Goshen,	298,894	195,496	-103,398	-34.61
Granby,	674,419	717,025	+42,606	+6.32
Greenwich,	259,971	201,828	-58,143	-22.37
Hadley,	1,171,412	1,283,165	+111,753	+9.54
Hatfield,	1,291,813	981,803	-310,010	-24.00
Huntington,	246,564	348,694	+102,130	+41.42
Middlefield,	183,360	256,597	+73,237	+39.94
Pelham,	230,337	264,647	+34,310	+13.16
Plainfield,	208,570	229,980	+21,390	+10.26
Prescott,	211,024	231,449	+20,425	+9.68
South Hadley,	604,023	725,127	+121,104	+20.05
Southampton,	733,446	783,409	+49,963	+6.80
Ware,	618,874	738,280	+119,406	+19.29
Westhampton,	367,361	309,462	-57,899	-15.76
Williamsburg,	412,210	517,256	+105,046	+25.48
Worthington,	402,661	492,448	+89,787	+22.30
MIDDLESEX.				
	\$29,764,533	\$34,035,729	+\$4,271,196	+14.37
Acton,	610,621	869,919	+259,298	+42.46
Arlington,	1,703,646	1,141,997	-561,649	-33.21
Ashby,	479,482	606,456	+126,974	+26.48
Ashland,	253,211	487,524	+234,313	+92.54
Ayer,	194,424	307,878	+113,454	+58.35
Bedford,	541,466	624,182	+82,716	+15.28
Belmont,	1,130,629	1,187,024	+56,395	+5.01
Billerica,	822,098	970,382	+148,284	+17.91

\* See notes on p. 204.



*Comparative Values of Agricultural Products and Property—Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
MIDDLESEX—Con.				
Boxborough, . . . . .	\$78,938	\$92,349	+\$13,411	+16.99
Burlington, . . . . .	115,433	123,124	+7,691	+6.66
Carlisle, . . . . .	79,260	84,834	+5,574	+7.03
Chelmsford, . . . . .	114,696	160,009	+45,313	+39.51
Concord, . . . . .	289,719	337,808	+48,089	+16.60
Dracut, . . . . .	181,978	242,233	+60,255	+33.11
Dunstable, . . . . .	66,643	84,993	+18,350	+27.53
Everett, . . . . .	26,248	66,076	+39,828	+151.74
Framingham, . . . . .	170,790	273,586	+102,796	+60.19
Groton, . . . . .	155,346	234,748	+79,402	+51.11
Holliston, . . . . .	90,404	112,319	+21,915	+24.24
Hopkinton, . . . . .	99,616	145,924	+46,308	+46.63
Hudson, . . . . .	87,458	94,623	+7,165	+8.08
Lexington, . . . . .	242,785	335,682	+92,897	+38.26
Lincoln, . . . . .	145,738	226,882	+81,144	+55.68
Littleton, . . . . .	135,090	174,793	+39,703	+29.39
Marlborough, . . . . .	166,471	232,514	+66,043	+39.67
Maynard, . . . . .	44,239	65,171	+20,932	+47.32
Medford, . . . . .	39,722	66,809	+27,087	+68.19
Melrose, . . . . .	14,451	59,931	+45,480	+314.72
Natick, . . . . .	90,899	96,816	+5,916	+6.74
North Reading, . . . . .	69,643	103,269	+33,626	+48.28
Pepperell, . . . . .	173,959	132,118	-41,841	-24.05
Reading, . . . . .	79,555	93,341	+13,786	+17.33
Sherborn, . . . . .	132,772	150,929	+18,157	+13.68
Shirley, . . . . .	105,663	107,753	+2,090	+1.98
Stoneham, . . . . .	50,497	47,361	-3,136	-6.20
Stow, . . . . .	132,927	144,332	+11,405	+8.58
Sudbury, . . . . .	161,108	268,024	+106,916	+66.36
Tewksbury, . . . . .	134,030	197,738	+63,708	+47.53
Townsend, . . . . .	111,412	111,635	+223	+0.20
Tyngsborough, . . . . .	77,421	82,764	+5,343	+6.90
Wakefield, . . . . .	31,921	55,644	+23,723	+74.00
Watertown, . . . . .	93,942	84,551	-9,391	-10.00
Wayland, . . . . .	123,325	169,357	+46,032	+37.33
Westford, . . . . .	140,210	180,136	+39,917	+28.47
Weston, . . . . .	203,467	253,388	+49,921	+24.54
Wilmington, . . . . .	48,682	76,006	+27,324	+56.45
Winchester, . . . . .	60,007	151,388	+91,381	+152.28
NANTUCKET.				
Nantucket, . . . . .	\$96,105	\$83,501	-\$12,604	-13.11
NORFOLK.				
	\$1,728,834	\$2,502,373	+\$773,539	+44.74
Bellingham, . . . . .	83,944	91,445	+7,501	+8.94
Brantree, . . . . .	93,851	100,616	+6,765	+7.21
Brookline, . . . . .	8,245	89,599	+81,354	+986.71
Canton, . . . . .	79,930	78,286	-1,644	-2.06
Cohasset, . . . . .	65,187	64,553	-634	-0.97
Dedham, . . . . .	128,082	192,294	+64,212	+50.13
Dover, . . . . .	63,212	108,672	+45,460	+71.92
Foxborough, . . . . .	13,018	88,197	+75,179	+577.50
Franklin, . . . . .	127,572	165,371	+37,799	+29.63
Holbrook, . . . . .	10,247	34,807	+24,560	+239.68
Hyde Park, . . . . .	6,179	25,814	+19,635	+317.83
Medfield, . . . . .	73,743	95,759	+22,016	+29.86
Medway,* . . . . .	121,963	82,184	-39,779	-32.62
Mills,* . . . . .	-	87,470	+87,470	-
Milton, . . . . .	122,577	148,297	+25,720	+20.98
Needham,† . . . . .	139,785	132,275	-7,510	-5.37
Norfolk, . . . . .	61,556	85,726	+24,170	+39.27
Norwood, . . . . .	32,476	70,146	+37,670	+115.99
Randolph, . . . . .	48,029	60,873	+12,844	+26.73
Sharon, . . . . .	75,940	70,006	-5,934	-7.81
Stoughton, . . . . .	124,580	82,860	-41,720	-33.48
Walpole, . . . . .	98,860	117,381	+18,521	+18.73
Wellesley,† . . . . .	-	98,093	+98,093	-

\* The town of Mills was set off from the town of Medway, February 24, 1885. See explanation, p. 212, *post*.

† See note on p. 207.

*Comparative Values of Agricultural Products and Property — Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
MIDDLESEX—Con.				
Boxborough, . . . . .	\$230,886	\$363,006	+\$132,120	+57.22
Burlington, . . . . .	464,026	518,745	+54,719	+11.79
Carlisle, . . . . .	324,801	405,719	+80,918	+24.91
Chelmsford, . . . . .	581,160	944,115	+362,955	+62.45
Concord, . . . . .	1,069,753	1,311,467	+241,704	+22.59
Dracut, . . . . .	914,290	1,166,940	+252,650	+27.63
Dunstable, . . . . .	314,917	374,889	+59,972	+19.04
Everett, . . . . .	174,198	590,015	+415,817	+238.70
Framingham, . . . . .	1,400,887	1,525,400	+115,513	+8.19
Groton, . . . . .	948,691	1,417,419	+468,728	+49.41
Holliston, . . . . .	518,521	568,766	+50,245	+9.69
Hopkinton, . . . . .	438,331	589,311	+150,980	+34.44
Hudson, . . . . .	412,158	515,697	+103,539	+25.12
Lexington, . . . . .	1,488,149	1,586,314	+98,165	+6.60
Lincoln, . . . . .	673,185	885,306	+212,121	+31.51
Littleton, . . . . .	535,001	769,168	+234,167	+43.77
Marlborough, . . . . .	865,145	1,106,199	+241,054	+27.86
Maynard, . . . . .	226,364	291,316	+64,952	+28.69
Medford, . . . . .	528,002	751,421	+223,419	+42.31
Melrose, . . . . .	114,148	290,346	+176,198	+154.36
Natick, . . . . .	582,165	640,766	+58,601	+10.07
North Reading, . . . . .	380,505	483,943	+103,438	+27.18
Pepperell, . . . . .	960,459	633,933	-326,526	-34.00
Reading, . . . . .	422,623	576,881	+154,258	+36.50
Sherborn, . . . . .	724,596	808,990	+84,394	+11.65
Shirley, . . . . .	517,861	569,258	+51,397	+9.92
Stoneham, . . . . .	366,588	183,195	-183,393	-50.03
Stow, . . . . .	571,665	671,036	+99,371	+17.38
Sudbury, . . . . .	723,896	1,034,794	+310,898	+42.95
Tewksbury, . . . . .	955,385	1,195,841	+240,456	+25.17
Townsend, . . . . .	600,141	615,093	+14,952	+2.49
Tyngsborough, . . . . .	375,517	407,054	+32,137	+8.56
Wakefield, . . . . .	370,105	329,581	-40,524	-10.96
Watertown, . . . . .	1,138,310	654,681	-483,629	-48.64
Wayland, . . . . .	577,013	665,371	+88,358	+15.31
Westford, . . . . .	791,823	1,000,081	+208,258	+26.30
Weymouth, . . . . .	1,020,881	1,183,703	+162,822	+15.97
Wilmington, . . . . .	345,135	528,046	+182,911	+53.17
Winchester, . . . . .	359,176	654,841	+295,665	+82.32
NANTUCKET.				
Nantucket, . . . . .	\$216,647	\$258,727	+\$42,080	+19.42
Nantucket, . . . . .	216,647	258,727	+42,080	+19.42
NORFOLK.				
Bellingham, . . . . .	\$10,164,491	\$14,537,651	+\$4,373,160	+43.02
Bramtree, . . . . .	276,385	386,979	+110,594	+40.01
Brookline, . . . . .	637,408	658,600	+21,192	+3.32
Brookline, . . . . .	112,607	1,205,350	+1,092,743	+970.40
Canton, . . . . .	733,974	865,365	+131,391	+18.03
Cohasset, . . . . .	869,040	431,631	-437,409	-50.33
Dedham, . . . . .	540,254	721,113	+180,859	+33.48
Dorchester, . . . . .	355,738	474,752	+119,014	+33.46
Foxborough, . . . . .	157,187	399,877	+242,690	+154.40
Franklin, . . . . .	662,848	618,562	-44,286	-6.68
Holbrook, . . . . .	23,938	180,114	+156,176	+652.42
Hyde Park, . . . . .	173,811	142,971	-30,840	-17.74
Medfield, . . . . .	450,226	490,776	+40,550	+9.01
Medway, . . . . .	599,444	384,352	-215,092	-35.88
Mills, . . . . .	-	344,646	+344,646	-
Milton, . . . . .	1,162,071	1,261,863	+99,792	+8.59
Needham, . . . . .	875,860	909,770	+33,910	+3.87
Norfolk, . . . . .	304,099	372,795	+68,696	+22.59
Norwood, . . . . .	161,598	332,244	+170,646	+105.60
Randolph, . . . . .	441,636	326,527	-115,109	-26.06
Sharon, . . . . .	424,230	371,215	-53,015	-12.50
Stoughton, . . . . .	258,855	280,786	+21,931	+8.47
Walpole, . . . . .	673,213	497,453	-175,760	-26.11
Wellesley, . . . . .	-	1,381,473	+1,381,473	-

\* See note on p. 206.

† The town of Wellesley was set off from the town of Needham, April 6, 1881. See explanation, p. 212, *post*.

*Comparative Values of Agricultural Products and Property—Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
NORFOLK—Con.				
Weymouth, . . . . .	\$78,620	\$138,552	+\$59,932	+76.23
Wrentham, . . . . .	70,638	193,787	+123,149	+174.34
PLYMOUTH.				
	\$1,609,071	\$2,027,329	+\$418,258	+25.99
Ablington, . . . . .	26,650	46,046	+19,396	+72.73
Bridgewater, . . . . .	107,132	141,378	+34,246	+31.97
Carver, . . . . .	56,131	105,791	+49,660	+88.47
Duxbury, . . . . .	68,290	80,577	+12,287	+17.99
East Bridgewater, . . . . .	73,908	65,956	-7,952	-10.76
Halifax, . . . . .	47,391	65,940	+18,549	+39.14
Hanover, . . . . .	94,895	83,248	-11,647	-12.27
Hanson, . . . . .	48,595	67,193	+18,598	+38.27
Hingham, . . . . .	63,339	83,440	+20,101	+31.74
Hull, . . . . .	6,938	4,277	-2,661	-38.35
Kingston, . . . . .	32,206	58,391	+26,185	+81.30
Lakeville, . . . . .	55,580	133,680	+78,100	+140.52
Marion, . . . . .	13,013	17,909	+4,896	+37.62
Marshfield, . . . . .	76,290	125,254	+48,964	+64.18
Mattapoisett, . . . . .	47,265	68,444	+21,179	+44.81
Middleborough, . . . . .	260,676	306,581	+45,905	+17.61
Pembroke, . . . . .	86,741	68,659	-18,082	-20.85
Plymouth,* . . . . .	-	-	-	-
Plymouth, . . . . .	34,470	53,734	+19,264	+55.99
Rochester, . . . . .	79,496	106,402	+26,906	+33.85
Rockland, . . . . .	46,188	21,779	-24,409	-52.85
Scituate, . . . . .	97,227	120,705	+23,478	+24.15
South Abington(now called Whitman), . . . . .	45,095	58,412	+13,317	+29.53
South Scituate* (now called Norwell), . . . . .	-	-	-	-
Wareham, . . . . .	51,656	40,490	-11,166	-21.62
West Bridgewater, . . . . .	89,899	103,043	+13,144	+14.62
SUFFOLK.				
	\$76,867	\$140,028	+\$63,161	+82.17
Revere, . . . . .	57,353	113,136	+55,783	+97.26
Winthrop, . . . . .	19,514	26,892	+7,378	+37.51
WORCESTER.				
	\$6,964,856	\$8,391,336	+\$1,426,480	+20.43
Ashburnham, . . . . .	100,222	111,454	+11,232	+11.21
Athol, . . . . .	92,754	143,653	+50,899	+54.85
Auburn, . . . . .	107,669	132,032	+24,363	+22.63
Barre, . . . . .	237,649	289,738	+52,089	+21.92
Berlin, . . . . .	80,893	120,881	+39,988	+49.43
Blackstone, . . . . .	86,199	115,381	+29,182	+33.85
Bolton, . . . . .	151,273	175,523	+24,250	+16.03
Boylston, . . . . .	131,729	127,437	-4,292	-3.26
Brookfield, . . . . .	119,661	189,187	+69,526	+58.10
Charlton, . . . . .	196,477	205,657	+9,180	+4.65
Clinton, . . . . .	10,594	33,154	+22,560	+212.95
Dana, . . . . .	65,217	65,904	+687	+1.05
Douglas, . . . . .	66,720	78,451	+11,731	+17.58
Dudley, . . . . .	103,337	155,395	+52,058	+50.38
Gardner, . . . . .	64,345	92,476	+28,131	+43.72
Grafton, . . . . .	160,053	218,022	+57,969	+36.22
Hardwick, . . . . .	195,812	214,027	+18,215	+9.30
Harvard, . . . . .	199,904	229,533	+29,629	+14.82
Holden, . . . . .	127,152	173,575	+46,423	+36.51
Hubbardston, . . . . .	118,335	172,726	+54,391	+45.96
Lancaster, . . . . .	126,253	180,761	+54,508	+43.17
Leicester, . . . . .	95,984	159,518	+63,534	+66.19
Leominster, . . . . .	210,534	189,734	-21,800	-10.35
Lunenburg, . . . . .	162,753	198,488	+35,735	+21.96
Mendon, . . . . .	96,964	134,231	+37,267	+38.43
Millford, . . . . .	135,573	115,343	-20,230	-14.92
Millbury, . . . . .	105,715	136,401	+30,686	+29.03
New Braintree, . . . . .	161,382	178,114	+16,732	+10.37

\* No return made. See p. 180, ante.

*Comparative Values of Agricultural Products and Property — Continued.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
NORFOLK — Con.				
Weymouth, . . . . .	\$566,690	\$866,783	+\$290,193	+51.22
Wrentham, . . . . .	303,479	1,141,664	+838,175	+276.19
PLYMOUTH.				
	\$7,885,397	\$10,114,066	+\$2,228,669	+28.26
Abington, . . . . .	212,192	289,118	+76,926	+36.25
Bridgewater, . . . . .	528,588	502,111	-26,477	-5.01
Carver, . . . . .	217,138	497,784	+280,646	+129.25
Duxbury, . . . . .	275,792	408,959	+133,167	+48.29
East Bridgewater, . . . . .	404,337	261,315	-143,022	-37.85
Halifax, . . . . .	226,569	276,820	+50,251	+22.18
Hanover, . . . . .	439,707	438,610	-1,097	-0.25
Hanson, . . . . .	311,764	450,312	+138,548	+44.44
Hingham, . . . . .	355,811	476,581	+120,770	+33.94
Hull, . . . . .	163,247	109,464	-53,783	-32.95
Kingston, . . . . .	173,569	432,638	+259,079	+149.27
Lakeville, . . . . .	269,814	491,789	+221,975	+82.27
Marion, . . . . .	148,964	190,452	+41,488	+27.85
Marshfield, . . . . .	319,115	600,457	+281,342	+88.16
Mattapoisett, . . . . .	249,208	373,463	+124,255	+49.86
Middleborough, . . . . .	1,104,591	1,349,016	+244,425	+22.13
Pembroke, . . . . .	475,600	460,025	-15,575	-3.27
Plymouth,* . . . . .	-	-	-	-
Plympton, . . . . .	212,125	304,752	+92,627	+43.67
Rochester, . . . . .	389,175	501,165	+111,990	+28.78
Rockland, . . . . .	82,021	136,344	+54,323	+66.23
Sctuate, . . . . .	389,557	571,204	+181,647	+46.63
South Abington(now called Whitman), . . . . .	356,994	333,820	-23,174	-6.49
South Sctuate*(now called Norwell), . . . . .	-	-	-	-
Wareham, . . . . .	207,112	228,309	+21,197	+10.23
West Bridgewater, . . . . .	372,417	439,558	+67,141	+18.03
SUFFOLK.				
	\$566,245	\$1,029,703	+\$463,458	+81.85
Revere, . . . . .	353,677	562,897	+209,220	+59.16
Winthrop, . . . . .	212,568	466,806	+254,238	+119.60
WORCESTER.				
	\$30,876,766	\$36,083,960	+\$4,207,204	+13.63
Ashburnham, . . . . .	424,099	529,256	+105,157	+24.80
Athol, . . . . .	323,221	647,319	+324,098	+100.27
Auburn, . . . . .	441,638	442,115	+477	+0.11
Barre, . . . . .	959,860	1,016,642	+56,782	+5.92
Berlin, . . . . .	385,256	516,221	+130,965	+33.99
Blackstone, . . . . .	435,596	465,305	+29,709	+6.82
Bolton, . . . . .	587,975	647,404	+59,429	+10.11
Boylston, . . . . .	672,700	518,270	-154,430	-22.96
Brookfield, . . . . .	616,853	781,385	+164,532	+26.80
Charlton, . . . . .	891,202	1,096,400	+205,198	+23.02
Clinton, . . . . .	60,336	149,127	+88,791	+146.26
Dana, . . . . .	200,416	260,976	+60,560	+30.22
Douglas, . . . . .	302,109	419,401	+117,292	+38.82
Dudley, . . . . .	451,819	571,179	+119,360	+26.42
Gardner, . . . . .	405,941	378,948	-26,993	-6.65
Grafton, . . . . .	777,289	882,985	+105,696	+13.60
Hardwick, . . . . .	708,118	787,773	+79,655	+11.25
Harvard, . . . . .	851,695	1,143,001	+291,306	+34.20
Holden, . . . . .	440,322	642,062	+201,740	+45.82
Hubbardston, . . . . .	525,635	717,494	+191,859	+36.50
Lancaster, . . . . .	638,312	877,442	+239,130	+37.46
Leicester, . . . . .	459,586	768,056	+308,470	+67.12
Leominster, . . . . .	1,242,545	1,118,904	-123,641	-9.95
Lunenburg, . . . . .	901,081	965,077	+63,996	+7.10
Mendon, . . . . .	452,371	562,273	+109,902	+24.29
Milford, . . . . .	536,906	487,632	-49,274	-9.18
Milbury, . . . . .	533,016	513,709	-19,307	-3.62
New Braintree, . . . . .	459,916	564,262	+104,346	+22.69

\* See note on p. 208.

*Comparative Values of Agricultural Products and Property — Concluded.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1873	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
WORCESTER—Con.				
Northborough, . . . . .	\$143,975	\$159,313	+15,338	+10.65
Northbridge, . . . . .	75,295	65,504	-9,791	-13.00
North Brookfield, . . . . .	107,085	148,703	+41,618	+38.88
Oakham, . . . . .	88,820	115,478	+26,658	+30.01
Oxford, . . . . .	130,300	139,419	+9,119	+7.00
Paxton, . . . . .	62,152	81,229	+19,077	+30.69
Petersham, . . . . .	148,558	167,583	+19,025	+12.51
Phillipston,* . . . . .	-	-	-	-
Princeton, . . . . .	147,795	170,478	+22,678	+15.34
Royalston, . . . . .	84,636	133,144	+48,508	+57.31
Rutland, . . . . .	110,124	151,997	+41,873	+38.02
Shrewsbury, . . . . .	147,030	175,616	+28,586	+19.44
Southborough, . . . . .	176,217	220,904	+44,687	+25.36
Southbridge, . . . . .	134,789	102,206	-32,583	-24.15
Spencer, . . . . .	168,895	215,668	+46,773	+27.69
Sterling, . . . . .	174,266	229,860	+55,594	+31.90
Sturbridge, . . . . .	133,394	125,162	-8,232	-6.15
Sutton, . . . . .	187,558	173,548	-14,010	-7.47
Templeton, . . . . .	84,207	103,728	+19,521	+23.18
Upton, . . . . .	92,347	128,648	+36,301	+39.31
Uxbridge, . . . . .	188,009	193,887	+5,878	+3.13
Warren, . . . . .	172,735	153,168	-19,567	-11.33
Webster, . . . . .	62,891	71,385	+8,494	+13.51
Westborough, . . . . .	220,484	218,508	-1,976	-0.90
West Boylston, . . . . .	93,814	122,590	+28,776	+30.67
West Brookfield, . . . . .	112,474	144,249	+31,775	+28.25
Westminster, . . . . .	126,485	193,931	+67,446	+53.32
Winchendon, . . . . .	79,418	89,664	+10,246	+12.90

\* No return made. See p. 180, ante.

## RECAPITULATION.

THE STATE, AND COUNTIES.	VALUE OF AGRICULTURAL PRODUCTS			
	Census of 1873	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
<b>THE STATE.</b>	<b>\$33,311,564</b>	<b>\$42,898,020</b>	<b>+\$9,587,056</b>	<b>+28.75</b>
Barnstable, . . . . .	552,476	950,175	+397,699	+71.98
Berkshire, . . . . .	3,268,490	4,400,025	+1,131,535	+34.62
Bristol, . . . . .	2,127,087	3,012,809	+885,722	+41.64
Dukes, . . . . .	133,141	211,320	+78,179	+58.72
Essex, . . . . .	2,570,352	3,801,401	+1,231,049	+47.89
Franklin, . . . . .	2,875,563	3,752,711	+877,148	+30.50
Hampden, . . . . .	2,661,225	3,013,099	+351,874	+13.22
Hampshire, . . . . .	3,120,108	3,497,865	+377,757	+12.11
Middlesex, . . . . .	5,527,389	7,114,648	+1,587,259	+28.72
Nantucket, . . . . .	96,105	83,501	-12,604	-13.11
Norfolk, . . . . .	1,728,834	2,502,373	+773,539	+44.74
Plymouth, . . . . .	1,609,071	2,027,329	+418,258	+25.99
Suffolk, . . . . .	76,867	140,028	+63,161	+82.17
Worcester, . . . . .	6,964,856	8,391,336	+1,426,480	+20.48

*Comparative Values of Agricultural Products and Property — Concluded.*

COUNTIES AND TOWNS.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
WORCESTER—Con.				
Northborough, . . . . .	\$604,204	\$658,307	+\$54,103	+8.96
Northbridge, . . . . .	315,219	348,348	+33,129	+10.51
North Brookfield, . . . . .	411,925	649,347	+237,422	+57.64
Oakham, . . . . .	299,399	344,730	+45,331	+15.14
Oxford, . . . . .	482,109	620,877	+138,768	+28.78
Paxton, . . . . .	256,814	294,933	+38,119	+14.84
Petersham, . . . . .	592,157	706,765	+114,608	+19.35
Phillipston,* . . . . .	-	-	-	-
Princeton, . . . . .	650,494	805,031	+154,537	+23.76
Royalston, . . . . .	515,259	598,473	+83,214	+16.15
Rutland, . . . . .	440,016	545,642	+105,626	+24.01
Shrewsbury, . . . . .	602,564	739,307	+136,743	+22.69
Southborough, . . . . .	903,897	1,053,959	+150,062	+16.60
Southbridge, . . . . .	817,399	426,664	-390,745	-47.80
Spencer, . . . . .	724,670	923,635	+203,965	+28.15
Sterling, . . . . .	827,843	1,010,065	+182,222	+22.01
Sturbridge, . . . . .	663,909	563,712	-100,197	-15.09
Sutton, . . . . .	990,879	716,765	-273,866	-27.63
Templeton, . . . . .	457,965	407,340	-50,615	-11.05
Upton, . . . . .	421,023	485,195	+64,172	+15.24
Uxbridge, . . . . .	769,371	849,470	+80,099	+10.54
Warren, . . . . .	670,444	590,585	-79,859	-11.91
Webster, . . . . .	295,705	271,363	-24,342	-8.23
Westborough, . . . . .	995,770	835,666	-160,104	-16.08
West Boylston, . . . . .	466,801	470,314	+3,513	+0.75
West Brookfield, . . . . .	437,352	524,798	+87,446	+19.99
Westminster, . . . . .	512,854	731,901	+219,047	+42.71
Winchendon, . . . . .	355,411	435,160	+79,749	+22.44

\* See note on p. 210.

## RECAPITULATION.

THE STATE, AND COUNTIES.	VALUE OF AGRICULTURAL PROPERTY			
	Census of 1875	Census of 1885	INCREASE (+), OR DECREASE (-), IN 1885	
			Values	Percentages
<b>THE STATE.</b>	<b>\$153,472,874</b>	<b>\$189,787,363</b>	<b>+ \$35,314,489</b>	<b>+23.01</b>
Barnstable, . . . . .	1,695,965	3,439,733	+1,743,768	+102.82
Berkshire, . . . . .	15,990,619	20,290,569	+4,299,950	+26.89
Bristol, . . . . .	9,297,763	12,249,294	+2,951,531	+31.74
Dukes, . . . . .	713,645	1,020,120	+306,475	+42.95
Essex, . . . . .	12,302,836	17,853,057	+5,550,221	+45.11
Franklin, . . . . .	11,479,388	12,953,774	+1,474,386	+12.84
Hampden, . . . . .	10,847,086	12,332,792	+1,485,706	+13.70
Hampshire, . . . . .	11,671,503	12,688,188	+1,016,685	+8.71
Middlesex, . . . . .	29,764,533	34,935,729	+5,171,196	+17.37
Nantucket, . . . . .	216,647	258,727	+42,080	+19.42
Norfolk, . . . . .	10,164,491	14,537,651	+4,373,160	+43.02
Plymouth, . . . . .	7,885,397	10,114,066	+2,228,669	+28.26
Suffolk, . . . . .	566,245	1,029,703	+463,458	+81.85
Worcester, . . . . .	30,876,756	35,083,960	+4,207,204	+13.63

## NOTES EXPLANATORY OF THE PRECEDING TABLE.

If the towns of Bourne and Sandwich in Barnstable county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$108,750; product in 1885, \$141,963; increase in 1885, \$33,213; percentage of increase, 30.54. Property in 1875, \$539,731; property in 1885, \$463,931; decrease in 1885, \$75,800; percentage of decrease, 14.04.

If the towns of Adams and North Adams in Berkshire county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$169,486; product in 1885, \$275,484; increase in 1885, \$105,998; percentage of increase, 62.54. Property in 1875, \$874,380; property in 1885, \$1,174,586; increase in 1885, \$300,206; percentage of increase, 34.33.

If the towns of Cottage City and Edgartown in Dukes county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$38,641; product in 1885, \$73,696; increase in 1885, \$35,055; percentage of increase, 90.72. Property in 1875, \$190,573; property in 1885, \$239,891; increase in 1885, \$49,318; percentage of increase, 25.88.

If the towns of Hampden and Wilbraham in Hampden county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$258,874; product in 1885, \$262,007; increase in 1885, \$3,133; percentage of increase, 1.21. Property in 1875, \$1,074,063; property in 1885, \$1,265,272; increase in 1885, \$191,209; percentage of increase, 17.80.

If the towns of Medway and Millis in Norfolk county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$121,963; product in 1885, \$169,654; increase in 1885, \$47,691; percentage of increase, 39.10. Property in 1875, \$599,444; property in 1885, \$728,998; increase in 1885, \$129,554; percentage of increase, 21.61.

If the towns of Needham and Wellealey in Norfolk county are combined so as to give comparisons for the same territory, we have the following results: Product in 1875, \$139,785; product in 1885, \$230,368; increase in 1885, \$90,583; percentage of increase, 64.80. Property in 1875, \$875,860; property in 1885, \$2,291,243; increase in 1885, \$1,415,383; percentage of increase, 161.60.

COMPARATIVE ACREAGE OF CULTIVATED LAND. FROM THE CENSUSES  
OF 1875 AND 1885.

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (-), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>BARNSTABLE.</b>	11,861	11,519½	-341½	-2.88
Barnstable, . . . . .	2,259	2,512½	+253½	+11.21
Bourne,* . . . . .	-	702½	+702½	-
Brewster, . . . . .	189	388½	+199½	+105.42
Chatham, . . . . .	801	406½	-394½	-49.25
Dennis, . . . . .	425	767½	+342½	+80.59
Eastham, . . . . .	901	522½	-378½	-41.98
Falmouth, . . . . .	1,106	1,050	-56	-5.06
Harwich, . . . . .	1,137	1,001	-136	-11.96
Mashpee, . . . . .	44	108½	+64½	+146.31
Orleans, . . . . .	1,633	1,178	-455	-27.86
Provincetown, . . . . .	-	172	+172	-
Sandwich,* . . . . .	2,619	1,276	-1,343	-51.28
Truro, . . . . .	326	399½	+73½	+22.62
Wellfleet, . . . . .	-	333½	+333½	-
Yarmouth, . . . . .	421	701½	+280½	+66.63
<b>BERKSHIRE.</b>	131,036	143,576½	+12,541½	+9.57
Adams,† . . . . .	4,591	3,064½	-1,527	-33.26
Alford, . . . . .	3,144	2,392	-751½	-23.89
Becket, . . . . .	4,893	4,610½	-282½	-5.77
Cheshire, . . . . .	3,640	4,548	+908	+24.95
Clarksburg, . . . . .	1,194	1,287½	+93½	+7.81
Dalton, . . . . .	2,648	2,309½	-338½	-12.78
Egremont, . . . . .	4,336	5,741½	+1,405½	+32.41
Florida, . . . . .	2,917	2,703½	-213½	-7.33
Great Barrington, . . . . .	5,565	9,774½	+4,209½	+75.64
Hancock, . . . . .	7,049	3,549	-3,500	-49.65
Hinsdale, . . . . .	4,188	3,666½	-521½	-12.45
Lanesborough, . . . . .	3,897	5,506½	+1,609½	+41.31
Lee, . . . . .	2,621	4,220½	+1,599½	+61.03
Lenox, . . . . .	2,754	4,352½	+1,598½	+58.04
Monterey, . . . . .	2,715	3,565½	+850½	+31.33
Mount Washington, . . . . .	941	1,100½	+159½	+16.95
New Ashford, . . . . .	900	1,433	+533	+59.22
New Marlborough, . . . . .	9,184	10,299½	+1,115½	+12.52
North Adams,† . . . . .	-	2,409½	+2,409½	-
Otis, . . . . .	3,122	3,532½	+410½	+13.15
Peru, . . . . .	3,521	3,279½	-241½	-6.87
Pittsfield, . . . . .	6,825	8,866½	+2,071½	+30.35
Richmond, . . . . .	3,824	3,669	-155	-4.05
Sandisfield, . . . . .	5,238	5,663½	+425½	+8.12
Savoy, . . . . .	6,648	3,740½	-2,907½	-43.74
Sheffield, . . . . .	7,931	11,971½	+4,040½	+50.94
Stockbridge, . . . . .	3,782	4,367	+585	+15.47
Tyringham, . . . . .	2,036	2,364½	+328½	+16.15
Washington, . . . . .	5,502	3,458	-2,044	-37.15
West Stockbridge, . . . . .	4,178	3,529½	-648½	-15.41
Williamstown, . . . . .	6,822	7,587½	+765½	+11.22
Windsor, . . . . .	4,464	4,984½	+520½	+11.65
<b>BRISTOL.</b>	44,964	49,656½	+4,692½	+10.44
Acushnet, . . . . .	1,978	2,499½	+521½	+26.67
Attleborough, . . . . .	3,297	3,896	+599	+18.17
Berkley, . . . . .	1,684	1,947½	+263½	+15.63
Dartmouth, . . . . .	6,919	6,249½	-669½	-9.68
Dighton, . . . . .	2,209	2,290½	+81½	+3.70
Easton, . . . . .	1,913	2,293½	+380½	+19.90
Fairhaven, . . . . .	1,094	1,356½	+262½	+23.98
Freetown, . . . . .	1,685	2,184	+499	+29.61
Mansfield, . . . . .	1,607	1,806	+199	+12.38

\* The town of Bourne was set off from the town of Sandwich, April 2, 1864. See explanation, p. 219, *post*.

† The town of North Adams was set off from the town of Adams, April 16, 1878. See explanation, p. 219, *post*.



## Comparative Acreage of Cultivated Land—Continued.

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (-), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>BRISTOL—Con.</b>				
Norton, . . . . .	1,986	1,390	-596	-30.01
Raynham, . . . . .	2,082	1,886 $\frac{1}{2}$	-195 $\frac{1}{2}$	-93.78
Rehoboth, . . . . .	4,959	6,036 $\frac{3}{4}$	+1,077 $\frac{3}{4}$	+21.74
Seekonk, . . . . .	2,553	3,594 $\frac{1}{2}$	+1,041 $\frac{1}{2}$	+40.79
Somerset, . . . . .	1,587	2,090	+503	+33.33
Swansea, . . . . .	3,246	4,533	+1,287	+39.66
Westport, . . . . .	6,190	5,602 $\frac{1}{2}$	-587 $\frac{1}{2}$	-9.49
<b>DUKES.</b>				
	4,893	3,916	-977	-19.97
Chilmark, . . . . .	1,001	1,284 $\frac{1}{2}$	+283 $\frac{1}{2}$	+28.23
Cottage City,* . . . . .	-	209 $\frac{3}{4}$	+209 $\frac{3}{4}$	-
Edgartown,* . . . . .	2,684	884 $\frac{1}{2}$	-1,799 $\frac{1}{2}$	-67.05
Gay Head, . . . . .	163	171 $\frac{1}{2}$	+8 $\frac{1}{2}$	+5.06
Gosnold, . . . . .	153	174 $\frac{1}{2}$	+21 $\frac{1}{2}$	+14.05
Tisbury, . . . . .	892	1,192	+300	+33.63
<b>ESSEX.</b>				
	58,541 $\frac{1}{4}$	61,891 $\frac{1}{4}$	+2,850	+4.87
Amesbury, . . . . .	900	1,497 $\frac{3}{4}$	+597 $\frac{3}{4}$	+66.42
Andover, . . . . .	2,954	5,177 $\frac{3}{4}$	+2,223 $\frac{3}{4}$	+75.28
Beverly, . . . . .	927 $\frac{1}{2}$	2,242 $\frac{1}{2}$	+1,314 $\frac{1}{2}$	+141.69
Boxford, . . . . .	2,513	2,944 $\frac{1}{2}$	+431 $\frac{1}{2}$	+17.18
Bradford, . . . . .	1,493	1,681 $\frac{1}{2}$	+188 $\frac{1}{2}$	+12.61
Danvers, . . . . .	2,360	3,095 $\frac{3}{4}$	+735 $\frac{3}{4}$	+31.18
Essex, . . . . .	2,981	1,163 $\frac{3}{4}$	-1,817 $\frac{1}{4}$	-60.96
Georgetown, . . . . .	1,133	1,451 $\frac{1}{2}$	+318 $\frac{1}{2}$	+28.13
Groveland, . . . . .	1,202	1,489 $\frac{3}{4}$	+287 $\frac{3}{4}$	+23.95
Hamilton, . . . . .	2,428 $\frac{1}{2}$	2,545	+116 $\frac{1}{2}$	+4.80
Ipwich, . . . . .	8,075	6,205 $\frac{1}{2}$	-1,869 $\frac{1}{2}$	-23.15
Lynnfield, . . . . .	993	856	-137	-13.80
Manchester, . . . . .	321	499 $\frac{1}{2}$	+178 $\frac{1}{2}$	+55.63
Marblehead, . . . . .	942	823 $\frac{1}{2}$	-118 $\frac{1}{2}$	-12.05
Merrimac, . . . . .	811	1,204 $\frac{1}{2}$	+393 $\frac{1}{2}$	+48.49
Methuen, . . . . .	3,490	3,389 $\frac{1}{2}$	-100 $\frac{1}{2}$	-2.89
Middleton, . . . . .	1,823	1,366 $\frac{1}{4}$	-456 $\frac{3}{4}$	-25.05
Nahant,† . . . . .	-	34 $\frac{1}{4}$	+34 $\frac{1}{4}$	-
Newbury, . . . . .	4,552	3,005	-1,547	-33.99
North Andover, . . . . .	2,963	3,825 $\frac{3}{4}$	+862 $\frac{1}{4}$	+29.11
Peabody, . . . . .	1,214	2,480 $\frac{1}{2}$	+1,272 $\frac{1}{2}$	+104.80
Rockport, . . . . .	402	507 $\frac{3}{4}$	+105 $\frac{3}{4}$	+26.24
Rowley, . . . . .	2,802	2,660 $\frac{1}{2}$	-141 $\frac{1}{2}$	-5.77
Salisbury, . . . . .	8,263	2,099	-6,164	-73.67
Saugus, . . . . .	660	864 $\frac{3}{4}$	+204 $\frac{3}{4}$	+31.04
Swampscott, . . . . .	861	280 $\frac{1}{2}$	-580 $\frac{1}{2}$	-67.37
Topsfield, . . . . .	2,533	3,308 $\frac{1}{2}$	+775 $\frac{1}{2}$	+30.61
Wenham, . . . . .	1,238	1,680 $\frac{1}{4}$	+442 $\frac{1}{4}$	+35.72
West Newbury, . . . . .	3,206	2,984 $\frac{1}{2}$	-221 $\frac{1}{2}$	-6.92
<b>FRANKLIN.</b>				
	75,257 $\frac{3}{4}$	76,687 $\frac{3}{4}$	+1,430 $\frac{1}{4}$	+1.90
Ashfield, . . . . .	3,983	4,320	+337	+8.46
Bernardston, . . . . .	2,560	2,647 $\frac{1}{4}$	+87 $\frac{1}{4}$	+3.41
Buckland, . . . . .	2,392	2,229 $\frac{1}{2}$	-162 $\frac{1}{2}$	-6.78
Charlemont, . . . . .	3,433	2,717 $\frac{3}{4}$	-715 $\frac{1}{4}$	-20.83
Colrain,† . . . . .	-	-	-	-
Conway, . . . . .	3,560	3,999 $\frac{3}{4}$	+439 $\frac{3}{4}$	+11.51
Deerfield, . . . . .	6,953	7,126 $\frac{1}{2}$	+173 $\frac{1}{2}$	+2.49
Erving, . . . . .	796	750 $\frac{1}{2}$	-49 $\frac{1}{2}$	-6.19
Gill, . . . . .	2,223	2,404 $\frac{1}{2}$	+181 $\frac{1}{2}$	+8.15
Greenfield, . . . . .	3,611 $\frac{1}{2}$	3,574	-37 $\frac{1}{2}$	-1.04
Hawley, . . . . .	2,338	2,534 $\frac{1}{2}$	+201 $\frac{1}{2}$	+8.64
Heath, . . . . .	3,022	2,875 $\frac{1}{2}$	-146 $\frac{1}{2}$	-4.85
Leverett, . . . . .	2,538 $\frac{1}{2}$	2,617 $\frac{1}{2}$	+79	+3.12
Leyden, . . . . .	2,279	2,565 $\frac{1}{2}$	+286 $\frac{1}{2}$	+12.57

\* The town of Cottage City was set off from the town of Edgartown, February 17, 1880. See explanation, p. 219, *post*.

† No return made in 1875.

‡ No return made. See p. 180, *ante*.

*Comparative Acreage of Cultivated Land—Continued.*

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (—), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>FRANKLIN—Con.</b>				
Monroe, . . . . .	1,090 $\frac{1}{2}$	1,050 $\frac{1}{2}$	—39 $\frac{1}{2}$	—3.62
Montague, . . . . .	3,953	3,956 $\frac{1}{2}$	+3 $\frac{1}{2}$	+0.10
New Salem, . . . . .	2,872	3,091	+219	+7.63
Northfield, . . . . .	5,035 $\frac{1}{2}$	5,081 $\frac{1}{2}$	+45 $\frac{1}{2}$	+0.91
Orange, . . . . .	3,136 $\frac{1}{2}$	3,640 $\frac{1}{2}$	+504 $\frac{1}{2}$	+16.09
Rowe, . . . . .	3,268 $\frac{1}{2}$	2,604 $\frac{1}{2}$	—663 $\frac{1}{2}$	—20.31
Shelburne, . . . . .	2,834	3,420	+586	+20.68
Shutesbury, . . . . .	3,602	1,672 $\frac{1}{2}$	—1,929 $\frac{1}{2}$	—52.24
Sunderland, . . . . .	2,247 $\frac{1}{2}$	2,902 $\frac{1}{2}$	+654 $\frac{1}{2}$	+29.14
Warwick, . . . . .	2,599 $\frac{1}{2}$	2,655 $\frac{1}{2}$	+56	+2.16
Wendell, . . . . .	1,475	2,185 $\frac{1}{2}$	+710 $\frac{1}{2}$	+48.19
Whately, . . . . .	8,560	4,087 $\frac{1}{2}$	—4,472 $\frac{1}{2}$	—52.13
<b>HAMPDEN.</b>	<b>70,409<math>\frac{1}{2}</math></b>	<b>75,800<math>\frac{1}{2}</math></b>	<b>+5,390<math>\frac{1}{2}</math></b>	<b>+7.66</b>
Agawam, . . . . .	4,666	7,064 $\frac{1}{2}$	+2,398 $\frac{1}{2}$	+51.41
Blandford, . . . . .	5,758	5,272 $\frac{1}{2}$	—485 $\frac{1}{2}$	—8.44
Brimfield, . . . . .	4,476	5,040 $\frac{1}{2}$	+564 $\frac{1}{2}$	+12.62
Chester, . . . . .	3,507	3,412 $\frac{1}{2}$	—94 $\frac{1}{2}$	—2.71
Chicopee, . . . . .	4,849	3,812 $\frac{1}{2}$	—1,036 $\frac{1}{2}$	—21.38
Granville,* . . . . .	—	—	—	—
Hampden,† . . . . .	—	3,244	+3,244	—
Holland, . . . . .	1,083	1,221 $\frac{1}{2}$	+138 $\frac{1}{2}$	+12.79
Longmeadow, . . . . .	8,098	4,005 $\frac{1}{2}$	—4,092 $\frac{1}{2}$	—50.54
Ludlow, . . . . .	3,730	7,696 $\frac{1}{2}$	+3,966 $\frac{1}{2}$	+106.00
Monson, . . . . .	4,216	4,645 $\frac{1}{2}$	+429 $\frac{1}{2}$	+10.20
Montgomery, . . . . .	1,717	1,253 $\frac{1}{2}$	—463 $\frac{1}{2}$	—27.01
Palmer, . . . . .	3,748	3,890 $\frac{1}{2}$	+142 $\frac{1}{2}$	+3.80
Russell, . . . . .	874	1,079 $\frac{1}{2}$	+205 $\frac{1}{2}$	+23.53
Southwick, . . . . .	4,523	4,588 $\frac{1}{2}$	+65 $\frac{1}{2}$	+1.45
Tolland, . . . . .	2,877	2,696	—181	—6.29
Wales, . . . . .	1,423 $\frac{1}{2}$	1,232 $\frac{1}{2}$	—191 $\frac{1}{2}$	—13.43
Westfield, . . . . .	5,962	6,408 $\frac{1}{2}$	+446 $\frac{1}{2}$	+7.48
West Springfield, . . . . .	2,723	3,153 $\frac{1}{2}$	+430 $\frac{1}{2}$	+15.86
Wilbraham,† . . . . .	6,173	6,083 $\frac{1}{2}$	—89 $\frac{1}{2}$	—1.45
<b>HAMPSHIRE.</b>	<b>93,783<math>\frac{1}{2}</math></b>	<b>82,515<math>\frac{1}{2}</math></b>	<b>—11,268<math>\frac{1}{2}</math></b>	<b>—12.02</b>
Amherst, . . . . .	6,307	6,559 $\frac{1}{2}$	+252 $\frac{1}{2}$	+4.00
Belchertown, . . . . .	17,129	7,954 $\frac{1}{2}$	—9,174 $\frac{1}{2}$	—53.56
Chesterfield, . . . . .	3,693	2,903 $\frac{1}{2}$	—789 $\frac{1}{2}$	—21.37
Cummington, . . . . .	3,504	3,214 $\frac{1}{2}$	—289 $\frac{1}{2}$	—8.27
Easthampton, . . . . .	2,388	3,378 $\frac{1}{2}$	+985 $\frac{1}{2}$	+41.27
Enfield, . . . . .	2,731	2,327 $\frac{1}{2}$	—403 $\frac{1}{2}$	—14.78
Goshen, . . . . .	1,985	1,841 $\frac{1}{2}$	—143 $\frac{1}{2}$	—7.23
Granby, . . . . .	3,793	5,787	+1,994	+52.57
Greenwich, . . . . .	2,316	1,912 $\frac{1}{2}$	—403 $\frac{1}{2}$	—17.43
Hadley, . . . . .	6,485	7,790 $\frac{1}{2}$	+1,305 $\frac{1}{2}$	+20.13
Hatfield, . . . . .	6,231	4,151 $\frac{1}{2}$	—2,079 $\frac{1}{2}$	—33.37
Huntington, . . . . .	7,758	2,423 $\frac{1}{2}$	—5,334 $\frac{1}{2}$	—68.76
Middlefield, . . . . .	2,412	2,917 $\frac{1}{2}$	+505 $\frac{1}{2}$	+20.95
Pelham, . . . . .	2,186	3,460 $\frac{1}{2}$	+1,274 $\frac{1}{2}$	+58.76
Plainfield, . . . . .	3,450	2,704 $\frac{1}{2}$	—745 $\frac{1}{2}$	—21.61
Prescott, . . . . .	2,075	2,143 $\frac{1}{2}$	+68 $\frac{1}{2}$	+3.30
Southampton, . . . . .	3,802	5,085	+1,283	+33.22
South Hadley, . . . . .	3,121	2,949 $\frac{1}{2}$	—171 $\frac{1}{2}$	—5.50
Ware, . . . . .	4,424	4,431 $\frac{1}{2}$	+7 $\frac{1}{2}$	+0.18
Weathampton, . . . . .	1,811	1,438 $\frac{1}{2}$	—372 $\frac{1}{2}$	—20.56
Williamsburg, . . . . .	2,142	2,062	—80	—3.73
Worthington, . . . . .	5,110 $\frac{1}{2}$	5,103 $\frac{1}{2}$	—7	—0.13
<b>MIDDLESEX.</b>	<b>112,299<math>\frac{1}{2}</math></b>	<b>116,146<math>\frac{1}{2}</math></b>	<b>+3,846<math>\frac{1}{2}</math></b>	<b>+3.43</b>
Acton, . . . . .	3,651 $\frac{1}{2}$	3,905 $\frac{1}{2}$	+254	+6.96
Arlington, . . . . .	1,125	1,037 $\frac{1}{2}$	—87 $\frac{1}{2}$	—7.76

\* No return made. See p. 180, ante.

† The town of Hampden was set off from the town of Wilbraham, March 28, 1878. See explanation, p. 219, post.

## Comparative Acreage of Cultivated Land—Continued.

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (-), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>MIDDLESEX—Con.</b>				
Ashby, . . . . .	2,955½	3,326½	+371½	+12.57
Ashland, . . . . .	1,059	1,558½	+499½	+47.14
Ayer, . . . . .	717	854½	+137½	+19.14
Bedford, . . . . .	2,261½	2,692½	+430½	+19.04
Belmont, . . . . .	940	1,422	+482	+51.28
Billerica, . . . . .	3,948	3,155½	-792½	-20.06
Boxborough, . . . . .	1,465½	1,343½	-122½	-7.71
Burlington, . . . . .	1,680	1,929	+249	+14.82
Carlisle, . . . . .	1,760	2,060½	+300½	+17.10
Chelmsford, . . . . .	2,246	3,618	+1,372	+61.09
Concord, . . . . .	4,903	5,295	+392	+7.96
Dracut, . . . . .	3,534½	3,816½	+281½	+7.96
Dunstable, . . . . .	2,035	2,04½	+7½	+0.35
Everett, . . . . .	620½	356½	-264½	-42.59
Frammingham, . . . . .	3,823½	4,844½	+1,021	+26.71
Groton, . . . . .	4,385½	4,333½	-52½	-1.19
Holliston, . . . . .	3,418	2,987½	-430½	-12.60
Hopkinton, . . . . .	2,330	2,605	+275	+11.80
Hudson, . . . . .	1,563½	2,065½	+502	+32.11
Lexington, . . . . .	3,816	3,859½	+43½	+1.14
Lincoln, . . . . .	2,648	3,233½	+585½	+22.13
Littleton, . . . . .	2,837	2,937½	+100½	+3.53
Marlborough, . . . . .	3,125½	4,041½	+915½	+29.50
Maynard, . . . . .	919	1,016½	+97½	+10.64
Medford, . . . . .	842	728	-114	-13.54
Melrose, . . . . .	204	213½	+9½	+4.53
Natick, . . . . .	1,779½	2,198½	+419	+23.55
North Reading, . . . . .	1,352½	1,614½	+262½	+19.40
Pepperell, . . . . .	3,888	3,232½	-655½	-16.85
Reading, . . . . .	1,065½	1,052½	-12½	-1.21
Sherborn, . . . . .	6,518½	3,591½	-2,927½	-44.91
Shirley, . . . . .	2,241½	1,988	-253½	-11.22
Stoneham, . . . . .	625	484½	-140½	-22.45
Stow, . . . . .	3,156½	3,065½	-91	-2.88
Sudbury, . . . . .	4,470½	4,616½	+146	+3.27
Tewksbury, . . . . .	2,738	4,058½	+1,320½	+48.24
Townsend, . . . . .	3,570½	2,443	-1,127½	-31.58
Tyngsborough, . . . . .	2,021	1,835½	-185½	-9.16
Wakefield, . . . . .	567½	624½	+57½	+10.12
Watertown, . . . . .	1,069	590½	-478½	-44.80
Wayland, . . . . .	2,687	3,066½	+379½	+14.13
Westford, . . . . .	3,721½	4,109½	+388½	+10.43
Weston, . . . . .	4,032½	3,801	-231½	-5.75
Wilmington, . . . . .	1,336	1,528½	+192½	+14.41
Winchester, . . . . .	635	965½	+330½	+52.01
<b>NANTUCKET.</b>				
Nantucket, . . . . .	1,680½	1,590½	-90	-5.35
Nantucket, . . . . .	1,680½	1,590½	-90	-5.35
<b>NORFOLK.</b>				
Bellingham, . . . . .	35,021½	37,868½	+2,847½	+8.13
Braintree, . . . . .	2,233½	2,081½	-152½	-6.82
Brookline, . . . . .	1,516½	1,553½	+37½	+2.48
Canton, . . . . .	240	525½	+285½	+116.80
Cohasset, . . . . .	2,028½	1,259	-769½	-37.93
Dedham, . . . . .	824	872½	+48½	+5.93
Dorchester, . . . . .	2,267½	1,553½	-713½	-31.45
Dover, . . . . .	1,285½	1,890	+604½	+47.03
Foxborough, . . . . .	770½	1,259½	+489½	+63.48
Franklin, . . . . .	3,267½	2,914½	-352½	-10.79
Holbrook, . . . . .	446½	282	-164½	-36.84
Hyde Park, . . . . .	70	285	+215	+307.14
Medfield, . . . . .	2,185	1,651½	-533½	-24.42
Medway,* . . . . .	2,866½	1,745½	-1,121	-39.53
Millis,* . . . . .	-	1,603½	+1,603½	-
Milton, . . . . .	2,062½	1,459½	-603½	-29.24
Needham†, . . . . .	2,401	1,719½	-681½	-28.39
Norfolk, . . . . .	1,501½	1,933½	+432	+28.73

\* The town of Millis was set off from the town of Medway, February 24, 1885. See explanation, p. 219, *post*.

† The town of Wellesley was set off from the town of Needham, April 6, 1881. See explanation, p. 219, *post*.

## Comparative Acreage of Cultivated Land—Continued

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (—), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>NORFOLK—Con.</b>				
Norwood, . . . . .	634½	748½	+114½	+18.03
Randolph, . . . . .	901	774	—127	—14.10
Sharon, . . . . .	1,301	1,440½	+139½	+10.70
Stoughton, . . . . .	1,048½	1,005	—43½	—4.15
Walpole, . . . . .	2,161½	2,244½	+82½	+3.82
Wellesley,* . . . . .	1,086½	1,604½	+518	+47.72
Weymouth, . . . . .	1,086½	1,604½	+518	+47.72
Wrentham, . . . . .	1,902	4,266½	+2,364½	+124.32
<b>PLYMOUTH.</b>				
	35,117½	35,155½	+37½	+0.11
Ablington, . . . . .	379½	716	+336½	+88.55
Bridgewater, . . . . .	2,303	2,095½	—207½	—9.02
Carver, . . . . .	964½	1,604½	+639½	+66.32
Duxbury, . . . . .	1,550½	1,380½	—169½	—10.95
East Bridgewater, . . . . .	1,923½	989½	—934	—48.56
Halifax, . . . . .	1,173½	1,264½	+90½	+7.73
Hanover, . . . . .	1,278	1,248½	—29½	—2.31
Hanson, . . . . .	1,204	1,427	+223	+18.62
Hingham, . . . . .	1,105	1,162½	+57½	+5.18
Hull, . . . . .	186½	64½	—122	—65.43
Kingston, . . . . .	816	1,026½	+210½	+25.81
Lakeville, . . . . .	1,570	2,253½	+683½	+43.55
Marion, . . . . .	311½	763½	+452	+145.10
Marshfield, . . . . .	2,482½	2,116½	—366	—14.74
Mattapoisett, . . . . .	1,022½	1,176½	+153½	+15.00
Middleborough, . . . . .	5,952	5,393½	—558½	—9.39
Pembroke, . . . . .	1,836	1,615	—221	—12.03
Plymouth,† . . . . .	—	—	—	—
Plympton, . . . . .	1,422	1,132½	—289½	—20.36
Rochester, . . . . .	1,852	2,203½	+351½	+18.97
Rockland, . . . . .	241	225	—16	—6.64
Scituate, . . . . .	1,750½	1,980½	+229½	+13.12
South Abington(now called Whitman), . . . . .	822½	779½	—43½	—5.24
South Scituate† (now called Norwell), . . . . .	—	—	—	—
Wareham, . . . . .	1,048	781½	—266½	—25.47
West Bridgewater, . . . . .	1,972	1,856	—116	—5.88
<b>SUFFOLK.</b>				
	969	951½	—17½	—1.81
Revere, . . . . .	535	719½	+184½	+34.63
Winthrop, . . . . .	434	231½	—202½	—46.60
<b>WORCESTER.</b>				
	172,826½	179,761½	+6,935	+4.01
Ashburnham, . . . . .	2,734½	3,131	+396½	+14.50
Athol, . . . . .	1,937	2,930	+993	+51.26
Auburn, . . . . .	2,084	2,152½	+68½	+3.29
Barre, . . . . .	6,391½	6,399½	+8	+0.11
Berlin, . . . . .	1,944½	1,980½	+36	+1.84
Blackstone, . . . . .	1,971½	2,102	+130½	+6.62
Bolton, . . . . .	3,364½	3,073½	—290½	—8.64
Boylston, . . . . .	2,963½	2,768	—195½	—6.60
Brookfield, . . . . .	3,446½	3,333	—113½	—3.30
Charlton, . . . . .	5,693	6,189½	+496½	+8.72
Clinton, . . . . .	223	358½	+135½	+60.52
Dana, . . . . .	2,155	2,804½	+649½	+30.13
Douglas, . . . . .	2,621½	2,157½	—463½	—17.69
Dudley, . . . . .	3,033	3,543	+510	+16.82
Gardner, . . . . .	1,734½	1,366	—368½	—21.25
Grafton, . . . . .	3,878½	4,267½	+389	+10.03
Hardwick, . . . . .	4,902½	5,594½	+692	+14.12
Harvard, . . . . .	4,091	4,807½	+716½	+17.61
Holden, . . . . .	2,828½	3,483½	+655	+23.15
Hubbardston, . . . . .	3,439	4,140½	+701½	+20.39
Lancaster, . . . . .	3,048½	3,851½	+803	+26.36
Leicester, . . . . .	2,224½	2,777	+552½	+24.84
Leominster, . . . . .	3,820½	3,611½	—209	—5.47

\* The town of Wellesley was set off from the town of Needham, April 6, 1881. See explanation, p. 219, *post*.

† No return made. See p. 180, *ante*.

## Comparative Acreage of Cultivated Land—Concluded.

COUNTIES AND TOWNS.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (-), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>WORCESTER—Con.</b>				
Lunenburg, . . . . .	3,807 $\frac{3}{4}$	4,189 $\frac{1}{2}$	+381 $\frac{1}{2}$	+10.03
Mendon, . . . . .	2,742 $\frac{1}{2}$	2,473 $\frac{3}{4}$	-268 $\frac{1}{2}$	-9.79
Milford, . . . . .	2,569 $\frac{1}{2}$	2,156 $\frac{3}{4}$	-412 $\frac{1}{2}$	-16.06
Millbury, . . . . .	2,257	2,550 $\frac{1}{2}$	+293 $\frac{1}{2}$	+12.99
New Braintree, . . . . .	3,420	3,785	+365	+10.67
Northborough, . . . . .	2,934	2,929 $\frac{1}{2}$	-4 $\frac{1}{2}$	-0.15
Northbridge, . . . . .	1,769 $\frac{1}{2}$	1,526 $\frac{3}{4}$	-242 $\frac{1}{2}$	-13.72
North Brookfield, . . . . .	2,946	3,734 $\frac{1}{2}$	+788 $\frac{1}{2}$	+26.77
Oakham, . . . . .	2,565 $\frac{1}{2}$	2,522	-43 $\frac{1}{2}$	-1.70
Oxford, . . . . .	2,984	3,210 $\frac{3}{4}$	+226 $\frac{3}{4}$	+7.60
Faxton, . . . . .	1,690	2,207 $\frac{1}{2}$	+507 $\frac{1}{2}$	+29.93
Petersham, . . . . .	4,586 $\frac{1}{2}$	6,181 $\frac{1}{2}$	+1,594 $\frac{1}{2}$	+34.78
Phillipston,* . . . . .	-	-	-	-
Princeton, . . . . .	8,433	2,915 $\frac{1}{2}$	-5,517 $\frac{1}{2}$	-15.07
Royalston, . . . . .	3,533 $\frac{3}{4}$	3,528	-5 $\frac{1}{2}$	-0.16
Rutland, . . . . .	8,890	4,307 $\frac{3}{4}$	-4,582 $\frac{1}{4}$	-10.74
Shrewsbury, . . . . .	3,409 $\frac{1}{2}$	3,381	-28 $\frac{1}{2}$	-0.84
Southborough, . . . . .	2,878	3,375 $\frac{1}{2}$	+497 $\frac{1}{2}$	+17.29
Southbridge, . . . . .	2,995 $\frac{1}{2}$	2,109 $\frac{1}{2}$	-886 $\frac{1}{2}$	-29.58
Spencer, . . . . .	3,982	4,463 $\frac{1}{2}$	+481 $\frac{1}{2}$	+12.09
Sterling, . . . . .	4,334 $\frac{1}{2}$	4,632 $\frac{1}{2}$	+298 $\frac{1}{2}$	+6.79
Sturbridge, . . . . .	4,441 $\frac{1}{2}$	3,148 $\frac{1}{2}$	-1,293 $\frac{1}{2}$	-29.11
Sutton, . . . . .	4,341	4,022	-319	-8.17
Templeton, . . . . .	2,573 $\frac{1}{2}$	2,797 $\frac{1}{2}$	+224 $\frac{1}{2}$	+8.90
Upton, . . . . .	2,707	2,793 $\frac{3}{4}$	+86 $\frac{3}{4}$	+3.20
Uxbridge, . . . . .	4,380 $\frac{3}{4}$	3,995 $\frac{1}{2}$	-385 $\frac{1}{2}$	-8.80
Warren, . . . . .	3,977	3,556 $\frac{1}{2}$	-420 $\frac{1}{2}$	-10.59
Webster, . . . . .	1,327 $\frac{1}{2}$	1,058 $\frac{3}{4}$	-269 $\frac{1}{4}$	-20.31
Westborough, . . . . .	4,493 $\frac{1}{2}$	4,205 $\frac{1}{2}$	-288 $\frac{1}{2}$	-6.40
West Boylston, . . . . .	2,147	2,451	+304	+14.16
West Brookfield, . . . . .	2,918	3,043 $\frac{3}{4}$	+125 $\frac{3}{4}$	+4.31
Westminster, . . . . .	3,157	3,357 $\frac{1}{2}$	+200 $\frac{1}{2}$	+6.36
Winchendon, . . . . .	2,992	3,228 $\frac{1}{2}$	+236 $\frac{1}{2}$	+7.90

\* No return made. See p. 180, ante.

## RECAPITULATION.

THE STATE, AND COUNTIES.	ACREAGE OF CULTIVATED LAND		INCREASE (+), OR DECREASE (-), IN 1885	
	Census of 1875	Census of 1885	Acres	Percentages
<b>THE STATE.</b>	848,660	876,638	+27,978	+3.28
Barnstable, . . . . .	11,861	11,519 $\frac{1}{2}$	-341 $\frac{1}{2}$	-2.88
Berkshire, . . . . .	131,035	143,576 $\frac{3}{4}$	+12,541 $\frac{3}{4}$	+9.57
Bristol, . . . . .	44,964	49,656 $\frac{1}{2}$	+4,692 $\frac{1}{2}$	+10.44
Dukes, . . . . .	4,893	3,916	-977	-19.97
Essex, . . . . .	58,541 $\frac{1}{2}$	61,391 $\frac{1}{2}$	+2,850	+4.87
Franklin, . . . . .	75,257 $\frac{3}{4}$	76,687 $\frac{1}{2}$	+1,430 $\frac{1}{2}$	+1.90
Hampden, . . . . .	70,409 $\frac{3}{4}$	75,800 $\frac{3}{4}$	+5,390 $\frac{3}{4}$	+7.66
Hampshire, . . . . .	93,783 $\frac{1}{2}$	82,515 $\frac{3}{4}$	-11,268 $\frac{1}{4}$	-12.02
Middlesex, . . . . .	112,299 $\frac{3}{4}$	116,146 $\frac{3}{4}$	+3,846 $\frac{3}{4}$	+3.43
Nantucket, . . . . .	1,680 $\frac{3}{4}$	1,590 $\frac{3}{4}$	-90	-5.35
Norfolk, . . . . .	35,021 $\frac{1}{2}$	37,868 $\frac{3}{4}$	+2,847 $\frac{1}{2}$	+8.18
Plymouth, . . . . .	35,117 $\frac{1}{2}$	35,155 $\frac{1}{2}$	+37 $\frac{1}{2}$	+0.11
Suffolk, . . . . .	969	951 $\frac{1}{2}$	-17 $\frac{1}{2}$	-1.81
Worcester, . . . . .	172,826 $\frac{1}{2}$	179,761 $\frac{1}{2}$	+6,935	+4.01

## NOTES EXPLANATORY OF THE PRECEDING TABLE.

If the towns of Bourne and Sandwich in Barnstable county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 2,619; number of acres of cultivated land in 1885, 1,978 $\frac{1}{4}$ ; decrease in 1885, 640 $\frac{1}{4}$ ; percentage of decrease, 24.46.

If the towns of Adams and North Adams in Berkshire county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 4,591; number of acres of cultivated land in 1885, 5,473 $\frac{1}{4}$ ; increase in 1885, 882 $\frac{1}{4}$ ; percentage of increase, 19.22.

If the towns of Cottage City and Edgartown in Dukes county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 2,684; number of acres of cultivated land in 1885, 1,094 $\frac{1}{4}$ ; decrease in 1885, 1,589 $\frac{1}{4}$ ; percentage of decrease, 59.24.

If the towns of Hampden and Wilbraham in Hampden county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 6,173; number of acres of cultivated land in 1885, 9,327 $\frac{1}{4}$ ; increase in 1885, 3,154 $\frac{1}{4}$ ; percentage of increase, 51.11.

If the towns of Medway and Mills in Norfolk county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 2,886 $\frac{1}{4}$ ; number of acres of cultivated land in 1885, 3,349 $\frac{1}{4}$ ; increase in 1885, 462 $\frac{1}{4}$ ; percentage of increase, 16.02.

If the towns of Needham and Wellesley in Norfolk county are combined so as to give comparisons for the same territory, we have the following results: Number of acres of cultivated land in 1875, 2,401; number of acres of cultivated land in 1885, 3,324; increase in 1885, 923; percentage of increase, 38.44.

## ANALYSIS.

*Number of Abandoned Farms.*

In analyzing the results of the preceding tables, the question first arises, To what extent has the abandonment of farm land proceeded? Wherever in the tables no figures appear opposite the name of a town it will be understood that the assessors report no abandoned farms, except in the case of six towns, mentioned in the introduction and designated by foot-notes in the tables, from which no returns were received. The extent of abandonment is indicated, in part, in the recapitulation on pages 192 and 193, showing the total number of abandoned farms in the State by counties. From it we learn that there are 1,461 such farms, 689 of which are without buildings while 772 are supplied with buildings. The aggregate acreage is 126,509½, the assessed valuation being \$1,076,328. Farms with buildings aggregate 66,650½ acres, the total value of the property being \$690,019, while the farms without buildings aggregate 59,858½ acres; but, owing to the fact that buildings are absent, the valuation is much less than for the farms of the other class, being only \$386,309. The town of Nantucket, comprising the whole of Nantucket County, reports no abandoned farms. None are found in Suffolk County. Dukes reports 11, Barnstable but 15, Norfolk, 36, Plymouth, 55, and Bristol, 52. Essex, one of the largest and most populous counties in the State, reports only two abandoned farms, while Middlesex County has but 76. The largest number of farms abandoned in any single county is found in the county of Worcester, 344 being the total, 157 without buildings and 187 having buildings; while Franklin, with a total of 229, Hampshire with 216, Hampden with 213, and Berkshire with 212, are next in order to Worcester. The results in these five counties, when compared with the returns for the remainder of the State, show that the abandonment has been almost entirely confined to the western half of the Commonwealth.

*Assessed Value of Abandoned Farms.*

The total assessed valuation of abandoned farms is largest in Worcester County, being \$314,731. Next comes Hampshire, \$132,072. The total valuation of abandoned farms in Middlesex County is \$117,795, although, as we have seen, the number

of such farms is relatively small. In Berkshire County the valuation is \$130,745 and in Franklin, \$117,434. Hampden follows with \$116,343. In no other single county does the total valuation of abandoned farms approach the values we have quoted. Norfolk ranks next in order, with \$44,195, while Plymouth with \$41,268 and Bristol with \$40,865 follow. The valuation of abandoned farms in the other counties is very slight, and may be determined from the table, the aggregate being only \$20,880.

The estimated market value per acre of abandoned farms ranges from \$2 to \$140. The figure last named is reported for the town of Marlborough in Middlesex County, in which five abandoned farms are returned, but, as explained by the assessors, these should hardly be classed with the other abandoned farms in the table, the fact being that at the date of the return they were in process of transition from farm to building property, and while abandoned for cultivation were really awaiting a market for building purposes, and, therefore, held at a higher price than would otherwise be the case. In but very few instances is the market value placed so high as \$20 per acre. In the majority of cases, as will be seen from the table, the assessors report that this land can be purchased for much less than \$10 per acre.

#### *Proportion of Land Abandoned.*

So far we have merely determined the number and acreage of abandoned farms, without reference to the total acreage in the towns or counties where the land has been abandoned. In Table II., pages 194 to 199, the acreage of abandoned farms is brought into comparison with the acreage of all farms as returned in the Census of 1885, excluding those within the limit of cities, and from the percentages we are able to determine the relative amount of farm land which has been abandoned. In the recapitulation, page 199, we find this proportion to be, for the State, 3.45 per cent. That is to say, out of the aggregate acreage of all farms, not including those within city limits or in the six towns from which no return respecting abandoned farms was received, namely, 3,661,833 $\frac{3}{4}$  acres, as shown by the Census of 1885, 126,509 $\frac{1}{4}$  acres have been abandoned, being 3.45 acres in every 100 acres of farm land in the towns. The percentage of assessed value of abandoned farms of the value



of all farm land is considerably less than the percentage of acreage of abandoned farms of the acreage of all farms. For instance, the value of all farm land in these towns in 1885, as reported by the farmers themselves, not as returned by the assessors, was \$93,803,077. The assessed value of abandoned farms in 1890 is found to be \$1,076,328, and this is but 1.15 per cent of the value of all farm land. That is to say, the assessed value of abandoned farms, including those with buildings thereupon, amounts to but 1.15 per cent of the total value of all farm land alone in the same towns, as returned by the owners thereof in 1885. These percentages indicate that for the Commonwealth at large the proportion of farm land abandoned, considered either as to acreage or value, is not very great. This comparison in the aggregate does not, of course, accurately represent conditions in certain sections of the State.

We have noticed that in the number of abandoned farms the county of Worcester leads. It is plain, however, from the recapitulation we are now considering, that in the proportion of farm land that has been abandoned Hampshire County leads, the total acreage of all farm land in the towns of Hampshire being 316,442, while 21,672 acres have been abandoned, or 6.85 per cent. Next come the towns of Hampden County having a total farm acreage of 300,736½, with 16,836 acres abandoned, or 5.60 per cent. Third in the line we find the towns of Berkshire County with 547,689¾ acres, 27,397 being abandoned, or 5.00 per cent. In this comparison Franklin County stands fourth, its total farm acreage in towns being 383,756½, of which 18,776 have been abandoned, or 4.89 per cent. Worcester County stands fifth in the line, its total farm acreage in towns being 798,890½, of which 29,117½ have been abandoned, or 3.64 per cent. Without entering into details, which may easily be drawn from the table for the other counties, it is sufficient to say that the proportion of acreage of abandoned farms of the acreage of all farms, excluding the cities, ranges between one and two per cent in Bristol, Dukes, Middlesex, Norfolk, and Plymouth counties, while it is less than one per cent in Barnstable and Essex counties. In Nantucket and Suffolk counties, as previously mentioned, no abandoned farms are returned. While Hampshire County leads in the comparison as to the percentage of acreage of farm land which has been abandoned, it also leads in the proportion

which the assessed value of such farms bears to the total valuation of farm land. That is to say, the assessed valuation of abandoned farms, including the buildings thereon, in Hampshire County amounts to 2.28 per cent of the total value of all farm land without buildings. In Hampden County this percentage is 1.88; Franklin, 1.83; Worcester, 1.83; Dukes, 1.42; and Berkshire, 1.28; but in no other county does it rise so high as one per cent.

*Land and Building Values Separated.*

It will be noticed that we have thus far compared the value of abandoned farm land and buildings with the Census value of farm land alone. From the nature of the returns it was impossible to present separately the exact value of the buildings upon abandoned farms. It would have been possible to include the Census value of buildings as well as land; but an inspection of the farm returns disclosed the fact that the buildings on abandoned farms form a much smaller proportion of the entire value of the property than is usual on farms under occupation. When a farm is abandoned the buildings begin to decay. Probably all the farms reported as abandoned without buildings were once fully supplied, and if those upon which buildings nominally remain are not reclaimed they will eventually be found in the other class. It seemed fairer, therefore, to use land values only, as returned in 1885, than to swell these values in the comparison by including buildings entirely disproportionate in value to those found on the abandoned farms. It is true that the extent of abandonment measured in value appears somewhat greater when buildings are included on one side of the comparison and excluded on the other side; but it was thought preferable to slightly overstate the case rather than to understate it, as would have been inevitable had the entire value of farm buildings in 1885 been included in the total used as the basis of comparison. By estimation, however, it is possible to compare land values only. For this purpose we have estimated the value of the abandoned farm land having buildings thereon at the average valuation per acre of abandoned farm land without buildings, and by deducting this estimated value from the total assessed value have obtained an estimated value of buildings. The following table presents the results for the State, by counties:

THE STATE, AND COUNTIES.	Value of all Farm Land in 1885	ESTIMATED VALUE OF ABANDONED FARM LAND AND BUILDINGS IN 1890		Assessed Value of Abandoned Farms in 1890	Percentages of Estimated Value of Abandoned Farm Land of Value of all Farm Land
		Farm Land	Buildings		
THE STATE.	\$93,803,077	\$816,406	\$259,922	\$1,076,328	0.87
Barnstable, .	1,657,313	4,660	6,390	11,050	0.28
Berkshire, .	10,221,355	110,557	20,188	130,745	1.08
Bristol, .	5,598,848	30,355	10,510	40,865	0.54
Dukes, .	487,424	4,243	2,677	6,920	0.87
Essex, .	8,814,938	*2,910	—	2,910	0.03
Franklin, .	6,428,883	92,173	25,261	117,434	1.43
Hampden, .	6,183,261	†116,928	—	116,343	1.89
Hampshire, .	5,800,379	104,709	27,363	132,072	1.81
Middlesex, .	17,989,032	87,330	30,465	117,795	0.49
Nantucket, .	124,228	—	—	—	—
Norfolk, .	7,464,743	25,106	19,089	44,195	0.34
Plymouth, .	5,180,840	35,304	5,964	41,268	0.68
Suffolk, .	628,950	—	—	—	—
Worcester, .	17,222,883	242,911	71,820	314,731	1.41

\* Includes buildings, value not given.

† See head-note to table on p. 227, *post*.

From the foregoing comparison it appears that of the assessed value of abandoned farms in the State, \$1,076,328, the value of land alone may be fairly estimated at \$816,406, and this amount is only 0.87 per cent of the value of all farm land as returned in 1885. The percentages of estimated value of all farm land do not rise above one per cent in any county except Berkshire, Franklin, Hampden, Hampshire, and Worcester, the highest percentage, 1.89, being found in Hampden County, Hampshire County following with 1.81 per cent, Franklin standing next with 1.43 per cent, while Worcester and Berkshire follow, the percentages being 1.41 and 1.08, respectively.

The comparatively small proportion which the value of abandoned farm land bears to the value of all farm land may be otherwise expressed. The percentages indicate, for instance, that for every \$100 worth of farm land in the State, \$0.87 worth is abandoned. Expressing the comparison in this way for the counties, we find that for each \$100 worth of farm land in the counties, respectively, a portion of land represented by the following value is abandoned: Barnstable, \$0.28; Berkshire, \$1.08; Bristol, \$0.54; Dukes, \$0.87; Franklin, \$1.43; Hampden, \$1.89; Hampshire, \$1.81; Middlesex, \$0.49; Nor-

folk, \$0.34; Plymouth, \$0.68; and Worcester, \$1.41. In Nantucket and Suffolk counties no land is abandoned, while in Essex County, for every \$100 worth of land, a portion valued at \$0.03 is abandoned.

*Average Size and Value of Abandoned Farms.*

For the purpose of showing the average size of the abandoned farms and their average value the following table is presented :

THE STATE, AND COUNTIES.	AVERAGE SIZE (IN ACRES) OF ABANDONED FARMS		AVERAGE VALUE OF ABANDONED FARMS		Estimated Average Value of Buildings on Abandoned Farms
	Farms with Buildings	Farms with- out Buildings	Farms with Buildings	Farms with- out Buildings	
THE STATE.	86	87	\$894	\$561	\$337
Barnstable, . . .	32	25	812	250	492
Berkshire, . . .	135	122	713	491	168
Bristol, . . . .	50	29	1,007	401	318
Dukes, . . . .	61	38	667	250	268
Essex, . . . .	57	—	1,455	—	—
Franklin, . . .	72	92	578	449	224
Hampden, . . .	103	58	707	401	*—
Hampshire, . .	91	108	735	520	297
Middlesex, . .	69	55	1,814	977	586
Nantucket, . .	—	—	—	—	—
Norfolk, . . .	50	67	1,395	848	764
Plymouth, . .	42	45	868	660	249
Suffolk, . . .	—	—	—	—	—
Worcester, . .	80	90	1,052	751	384

\* See head-note to table on p. 227, *post*.

It is apparent from the above table that the average size in acres, for the State, of the farms with buildings and of those without buildings is approximately the same, the first class containing 86 acres on the average and the second 87. The average value for those having buildings is \$894, while the average for those without buildings is \$561. The estimated average value of buildings on the abandoned farms is \$337. The table presents the figures by counties so that the position of each county with respect to the State at large can be readily determined, and requires no extended analysis. It appears that in three of the counties containing large proportions of abandoned farm land, namely, Berkshire, Hampden, and Hampshire, the average size of farms with buildings is larger than the average for the State. The same statement may be made with respect to the class of abandoned farms without buildings,

except in the county of Hampden. With respect to the value of farms of each of these classes, however, these counties rank below the average for the State. The abandoned farms having the highest valuation are found, as might be expected, in the eastern counties, Essex, Middlesex, and Norfolk leading, while the abandoned farms in the county of Worcester rank next in value, with those in the county of Bristol not far behind. But, as previously pointed out, except in the county of Worcester, the abandoned farm land in the counties named is small in amount, actually, and also relatively to the entire farm acreage of the counties. It clearly appears from this table that the buildings upon the abandoned farms are of little account, the highest average value anywhere reported being in the county of Norfolk, and reaching there only \$764.

As we have previously pointed out, the size of the farms in the Commonwealth is gradually increasing while their number is decreasing. For the purpose of showing the increase in the size of farms since 1875 and also the increase in the average value of such farms and of the buildings thereon, the following table is conclusive :

THE STATE, AND COUNTIES.	AVERAGE SIZE (IN ACRES) OF ALL FARMS		AVERAGE VALUES OF ALL FARMS		AVERAGE VALUES OF BUILDINGS ON ALL FARMS	
	1875	1885	1875	1885	1875	1885
THE STATE.	78	88	\$3,232	\$3,848	\$1,230	\$1,598
Barnstable, . .	83	72	2,000	2,579	956	1,163
Berkshire, . .	124	139	3,550	4,332	1,179	1,729
Bristol, . . .	61	68	2,558	3,540	1,053	1,653
Dukes, . . . .	91	104	1,634	2,145	595	929
Essex, . . . .	55	63	3,628	4,892	1,354	2,051
Franklin, . . .	87	106	2,566	2,948	898	1,166
Hampden, . . .	86	103	2,923	3,558	1,114	1,442
Hampshire, . .	88	97	2,858	3,243	1,115	1,464
Middlesex, . .	63	68	4,694	5,038	1,811	2,019
Nantucket, . .	152	139	1,556	3,582	608	1,511
Norfolk, . . .	58	62	3,984	4,975	1,714	2,104
Plymouth, . .	56	87	2,270	3,556	1,052	1,474
Suffolk, . . .	22	34	8,607	17,506	1,790	5,639
Worcester, . .	83	87	3,113	3,195	1,120	1,316

The preceding table indicates that while the average size of the farms in the State in 1875 was 78 acres, it had risen to 88 acres in 1885. The average value of all farms increased during the same period from \$3,232 to \$3,848, while the average

value of buildings on all farms increased from \$1,230 to \$1,598. It also appears that there was an increase in the average size of farms in each county except the counties of Barnstable and Nantucket, which show a slight decrease. Every county shows an increase in the average value per farm, and, also, an increase in the average value of buildings on farms. Bearing in mind the figures presented in the table upon page 225 as to the average size and value of abandoned farms with the buildings thereon, it at once appears that while the average size of abandoned farms, so far as the State is concerned, does not materially differ from the average size of all farms, yet the value of the abandoned farms, and of the buildings on such farms, is very much less than the average value of all farms and buildings, showing conclusively that the farms which are abandoned are those of least value.

The following table for the towns containing abandoned farms permits a comparison as respects size and values between all farms and abandoned farms :

[To arrive at the average value of buildings upon each farm we have assumed that the value of the land in farms having buildings is the same as the value of the land in farms without buildings. Wherever the value of land and buildings is in excess of this assumed value of the land, the difference has been taken as indicating the value of the buildings, and the average value of buildings per farm has been obtained by dividing this assumed value of buildings by the number of farms with buildings. In some cases, by the application of this rule, no balance remains to indicate the value of buildings. This result may depend upon the fact that the land upon farms having buildings was worth less per acre than the value reported for farms with buildings, or it may be that the value of the buildings was really very small, and that, in many cases, the buildings had no value. It is evident that it would be necessary, in many cases, to figure the value of the land in the farms with buildings at a less rate per acre than for the farms without buildings, in order to leave any balance for the value of buildings themselves. But, as we were obliged to proceed upon the assumption that the value of the land in farms with buildings was the same as that in farms without buildings, we have indicated these cases where no balance was left for the value of the buildings themselves by prefixing an asterisk to a dash (\*) in the right-hand column of the table.]

COUNTIES AND TOWNS.	AVERAGE SIZE (IN ACRES)		AVERAGE VALUES		AVERAGE VALUES OF BUILDINGS ON —	
	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890
<b>BARNSTABLE.</b>						
Bourne, . . .	183	89	\$2,382	\$1,075	\$695	—
Eastham, . . .	53	23	1,971	600	1,078	\$445
Sandwich, . . .	179	13	2,372	1,700	1,132	—
<b>BERKSHIRE.</b>						
Adams, . . .	116	140	\$4,747	\$600	\$1,366	—
Alford, . . .	123	128	4,119	1,400	1,528	*—

COUNTIES AND TOWNS.	AVERAGE SIZE (IN ACRES)		AVERAGE VALUES		AVERAGE VALUES OF BUILDINGS ON—	
	All Farms in 1886	Abandoned Farms in 1890	All Farms in 1886	Abandoned Farms in 1890	All Farms in 1886	Abandoned Farms in 1890
<b>BERKSHIRE — CON.</b>						
Becket, . . . . .	180	147	\$1,531	\$642	\$650	*—
Cheshire, . . . . .	149	120	4,105	533	1,616	—
Florida, . . . . .	149	86	1,656	516	634	*—
Hancock, . . . . .	265	370	5,311	5,000	1,714	—
Lanesborough, . . . . .	163	114	4,754	500	1,540	—
Monterey, . . . . .	111	146	2,167	1,018	904	\$590
Mount Washington, . . . . .	411	252	3,848	1,367	1,224	*—
New Ashford, . . . . .	257	100	3,434	500	960	—
New Marlborough, . . . . .	115	168	3,346	766	1,484	388
Otis, . . . . .	146	127	1,559	313	669	125
Peru, . . . . .	134	155	1,190	622	521	*—
Richmond, . . . . .	96	76	3,777	1,544	1,276	613
Sandisfield, . . . . .	162	139	2,285	444	1,091	219
Savoy, . . . . .	134	96	895	385	336	185
Washington, . . . . .	199	71	1,644	588	510	—
Windsor, . . . . .	197	137	2,726	623	1,104	69
<b>BRISTOL.</b>						
Attleborough, . . . . .	66	74	\$4,098	\$1,250	\$2,095	—
Easton, . . . . .	98	84	4,218	1,831	1,739	—
Freetown, . . . . .	105	56	3,886	1,688	1,881	\$1,197
Mansfield, . . . . .	58	26	3,051	343	1,586	—
Rehoboth, . . . . .	72	23	2,571	286	1,155	125
Swansea, . . . . .	63	37	3,820	597	1,665	—
Westport, . . . . .	74	46	2,644	792	1,321	362
<b>DUKES.</b>						
Chilmark, . . . . .	86	44	\$1,721	\$460	\$692	—
Edgartown, . . . . .	119	62	1,842	679	901	\$317
Tisbury, . . . . .	78	63	2,011	625	1,092	—
<b>ESSEX.</b>						
Groveland, . . . . .	36	64	\$2,379	\$1,680	\$1,242	—
Middleton, . . . . .	78	50	3,602	1,230	1,427	—
<b>FRANKLIN.</b>						
Ashfield, . . . . .	101	137	\$1,942	\$653	\$917	\$78
Bernardston, . . . . .	98	75	3,095	583	1,485	167
Charlemont, . . . . .	113	105	2,755	475	1,125	*—
Conway, . . . . .	135	73	3,112	550	1,349	195
Hawley, . . . . .	143	110	1,436	603	615	368
Heath, . . . . .	128	88	1,977	500	936	—
New Salem, . . . . .	99	49	1,617	700	641	461
Northfield, . . . . .	77	57	3,324	415	1,503	267
Orange, . . . . .	83	50	3,857	250	1,354	—
Rowe, . . . . .	209	125	1,790	745	791	508
Shutesbury, . . . . .	108	80	1,081	600	348	425
Warwick, . . . . .	149	72	1,811	572	564	327
Wendell, . . . . .	163	79	1,711	255	569	89
Whately, . . . . .	79	32	3,584	525	1,513	338

COUNTIES AND TOWNS.	AVERAGE SIZE (IN ACRES)		AVERAGE VALUES		AVERAGE VALUES OF BUILDINGS ON —	
	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890
<b>HAMPDEN.</b>						
Blandford, . . .	165	174	\$2,072	\$935	\$882	\$243
Brimfield, . . .	118	114	3,278	777	1,733	107
Chester, . . .	165	150	2,309	718	990	*—
Holland, . . .	122	64	1,991	526	873	316
Monson, . . .	123	50	2,703	444	995	265
Russell, . . .	125	40	1,772	400	883	—
Southwick, . . .	107	27	2,611	378	1,080	85
Tolland, . . .	157	242	1,245	1,084	510	456
Wales, . . .	99	71	1,705	383	862	178
Westfield, . . .	83	33	4,558	330	1,632	—
Wilbraham, . . .	93	100	4,280	500	1,671	—
<b>HAMPSHIRE.</b>						
Belchertown, . . .	86	76	\$3,153	\$774	\$1,633	\$78
Chesterfield, . . .	147	88	2,446	642	1,115	289
Cummington, . . .	141	106	2,624	803	1,208	444
Enfield, . . .	105	112	2,863	625	1,299	*—
Granby, . . .	122	61	4,287	978	1,597	—
Greenwich, . . .	142	113	2,069	675	938	450
Huntington, . . .	133	100	2,529	500	1,236	*—
Middlefield, . . .	206	138	2,631	962	1,148	757
Pelham, . . .	109	58	1,817	457	755	222
Plainfield, . . .	126	102	1,820	573	766	443
Prescott, . . .	82	63	1,648	503	719	347
Ware, . . .	90	84	3,378	461	1,551	*—
Westhampton, . . .	151	125	2,415	518	1,041	125
Worthington, . . .	127	139	2,223	730	980	161
<b>MIDDLESEX.</b>						
Ashby, . . .	70	64	\$2,378	\$578	\$976	\$350
Ashland, . . .	78	66	4,237	2,800	2,108	—
Bedford, . . .	72	65	4,699	1,650	2,020	—
Burlington, . . .	81	15	4,742	513	1,921	*—
Holliston, . . .	91	65	4,231	1,900	1,700	—
Hopkinton, . . .	75	42	3,053	1,020	1,498	—
Hudson, . . .	54	23	3,670	350	1,366	*—
Littleton, . . .	80	58	4,190	3,325	1,718	—
Marlborough, . . .	54	80	3,887	1,600	1,322	542
North Reading, . . .	47	98	2,563	1,982	1,081	*—
Pepperell, . . .	76	55	3,629	1,579	1,720	456
Shirley, . . .	90	80	4,269	1,650	1,961	358
Stow, . . .	87	66	4,745	1,697	1,638	646
Sudbury, . . .	70	90	4,364	2,933	1,879	—
Wayland, . . .	74	22	5,392	933	2,371	317
Westford, . . .	71	93	3,284	2,073	1,646	*—
Wilmington, . . .	45	68	2,165	1,519	975	—
<b>NORFOLK.</b>						
Bellingham, . . .	59	81	\$2,520	\$813	\$1,188	*—
Franklin, . . .	63	38	2,894	400	1,296	*—
Millis, . . .	112	78	4,906	1,825	1,955	—
Needham, . . .	29	50	3,305	4,800	1,556	—
Norwood, . . .	77	75	5,568	2,748	2,253	\$2,340



COUNTIES AND TOWNS.	AVERAGE SIZE (IN ACRES)		AVERAGE VALUES		AVERAGE VALUES OF BUILDINGS ON—	
	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890	All Farms in 1885	Abandoned Farms in 1890
<b>NORFOLK — Con.</b>						
Sharon, . . .	135	44	\$4,501	\$770	\$1,469	\$275
Walpole, . . .	79	50	3,615	1,200	1,842	—
Wrentham, . . .	62	52	3,356	903	1,897	374
<b>PLYMOUTH.</b>						
Bridgewater, . .	87	25	\$4,034	\$995	\$1,986	\$552
Carver, . . .	177	33	3,976	278	1,073	184
East Bridgewater, .	59	14	2,774	350	1,338	—
Halifax, . . .	77	85	2,359	2,155	884	186
Kingston, . . .	77	58	3,351	800	1,757	—
Lakeville, . . .	113	41	3,047	400	1,197	—
Mattapoisett, . .	82	37	3,928	714	1,443	—
Middleborough, . .	100	47	3,617	717	1,472	173
Plympton, . . .	62	41	2,048	630	966	—
<b>WORCESTER.</b>						
Ashburnham, . . .	121	96	\$2,594	\$1,123	\$927	*—
Athol, . . .	91	75	2,528	938	763	\$115
Barre, . . .	102	72	3,234	981	1,274	12
Boylston, . . .	77	16	3,357	430	1,567	—
Brookfield, . . .	77	140	3,570	500	1,600	—
Charlton, . . .	82	99	2,985	1,855	1,194	513
Clinton, . . .	73	98	4,495	4,700	1,953	—
Dana, . . .	62	84	1,173	879	546	207
Douglas, . . .	69	55	1,408	456	591	648
Dudley, . . .	103	101	3,523	1,359	1,549	993
Hardwick, . . .	119	66	3,347	457	1,473	67
Harvard, . . .	85	100	4,228	1,050	1,933	—
Holden, . . .	93	106	2,509	1,575	898	689
Hopedale, . . .	—	50	—	1,800	—	—
Hubbardston, . .	106	118	2,602	1,461	1,086	290
Leicester, . . .	88	75	4,647	1,012	1,894	289
Leominster, . . .	75	731	4,365	1,000	1,797	—
Lunenburg, . . .	79	29	3,725	691	1,393	454
Mendon, . . .	44	74	1,868	993	745	175
New Braintree, . .	112	98	3,598	1,103	1,417	217
North Brookfield, .	60	55	2,801	1,200	1,273	432
Oakham, . . .	111	74	2,525	680	996	287
Oxford, . . .	88	58	3,301	705	1,373	268
Paxton, . . .	69	91	179	1,513	672	615
Petersham, . . .	118	90	2,704	877	972	*—
Princeton, . . .	78	90	2,593	802	1,090	64
Royalston, . . .	129	102	2,591	745	975	303
Rutland, . . .	129	87	2,632	910	976	235
Shrewsbury, . . .	74	62	4,103	600	1,567	*—
Southbridge, . . .	134	151	4,588	1,452	2,124	610
Sturbridge, . . .	132	69	3,324	751	1,511	305
Sutton, . . .	84	44	3,280	577	1,356	12
Upton, . . .	75	62	2,958	804	1,472	—
Uxbridge, . . .	65	10	2,840	150	1,364	—
Warren, . . .	152	128	4,983	1,619	2,145	—
West Brookfield, .	126	25	4,519	450	1,884	—
Westminster, . . .	71	54	2,658	640	1,169	17
Winchendon, . . .	109	67	2,272	188	802	—

The preceding table enforces the points previously brought out, namely, that the value of abandoned farms is, as a rule, very much less than the value of farms under cultivation, and that the buildings thereon are of little value compared with the average value of the farm buildings in the respective towns.

*Percentages of Abandoned Farm Acreage by Towns.*

Sixty-nine towns show a percentage of acreage of farm land abandoned larger than is shown for the State. These are Eastham, Alford, Becket, Florida, Monterey, Mount Washington, New Marlborough, Otis, Peru, Richmond, Sandisfield, Savoy, Washington, Windsor, Easton, Edgartown, Ashfield, Hawley, Heath, Northfield, Shutesbury, Warwick, Wendell, Blandford, Brimfield, Chester, Holland, Monson, Southwick, Tolland, Wales, Wilbraham, Chesterfield, Cummington, Enfield, Greenwich, Huntington, Middlefield, Pelham, Plainfield, Prescott, Westhampton, Worthington, Ashby, North Reading, Shirley, Stow, Norwood, Wrentham, Halifax, Mattapoisett, Ashburnham, Barre, Charlton, Clinton, Dana, Douglas, Dudley, Hubbardston, Leominster, Oxford, Paxton, Petersham, Princeton, Royalston, Rutland, Southbridge, Sturbridge, and Sutton. Three of these, namely, Chesterfield, Huntington, and Westhampton in Hampshire County, report more than twenty per cent of their total farm acreage as abandoned. In Huntington the abandoned farm acreage is 32.14 per cent of the total farm acreage and the assessed value of the abandoned farms is \$23,500, or 16.52 per cent of the value of all farm land in 1885. In Chesterfield the percentage of acreage of abandoned farms of the acreage of all farms is 22.24, the assessed valuation being \$26,305, or 17.97 per cent of the total value of all farm land in 1885. In Westhampton the percentage of acreage of abandoned farms of the acreage of all farms is 22.01, the assessed valuation being \$14,500, or 10.06 per cent of the total value of all farm land in 1885.

In the following towns the percentage of acreage of abandoned farms of the acreage of all farms is more than 10, but less than 20, the percentage being, in each case, annexed: in Berkshire County, Becket, 15.58, Otis, 19.19, Peru, 17.79, Savoy, 13.51, Windsor, 14.19; in Franklin County, Hawley, 13.83, Shutesbury, 18.21, Warwick, 18.78, Wendell, 17.64; in

Hampden County, Blandford, 12.07, Chester, 17.90, Holland, 14.02, Monson, 11.05; in Hampshire County, Middlefield, 11.65, Plainfield, 15.53; in Middlesex County, Stow, 12.41; in Worcester County, Douglas, 12.21, Royalston, 12.94.

If we extend the examination to towns having more than five, but not exceeding 10 per cent of their farm land abandoned we find, in Barnstable County, Eastham, 9.65; in Berkshire County, Monterey, 5.90, Mount Washington, 6.12, New Marlborough, 9.48, Sandisfield, 7.95; in Dukes County, Edgartown, 5.13; in Franklin County, Ashfield, 8.26; in Hampden County, Brimfield, 6.77, Southwick, 9.77, Tolland, 8.26, Wales, 5.80; in Hampshire County, Cummington, 6.35, Enfield, 7.23, Prescott, 6.25, Worthington, 6.31; in Middlesex County, Shirley, 6.34; in Norfolk County, Wrentham, 5.41; in Plymouth County, Mattapoisett, 5.43; in Worcester County, Ashburnham, 9.83, Barre, 7.51, Charlton, 5.04, Dana, 7.23, Dudley, 5.87, Hubbardston, 5.25, Leominster, 8.98, Oxford, 6.86, Paxton, 9.74, Petersham, 7.78, Rutland, 8.60, Southbridge, 7.29.

Towns reporting more than three, but not exceeding five per cent are, in Berkshire County, Alford, 4.97, Florida, 3.99, Richmond, 4.58, Washington, 4.15; in Bristol County, Easton, 3.52, Westport, 3.39; in Franklin County, Bernardston, 3.29, Heath, 3.91, Northfield, 3.61; in Hampden County, Wilbraham, 3.75; in Hampshire County, Belchertown, 3.38, Greenwich, 4.13, Pelham, 4.55; in Middlesex County, Ashby, 3.56, Marlborough, 3.13, North Reading, 3.84; in Norfolk County, Bellingham, 3.15, Norwood, 3.75; in Plymouth County, Halifax, 4.25; in Worcester County, Clinton, 4.49, Leicester, 3.45, Oakham, 3.11, Princeton, 4.75, Sturbridge, 4.70, Sutton, 4.28, Warren, 3.35.

The following towns report from one to three per cent inclusive: in Barnstable County, Bourne, 1.37; in Berkshire County, Adams, 1.08, Cheshire, 2.10, Hancock, 2.02, New Ashford, 1.30; in Bristol County, Freetown, 2.22, Rehoboth, 1.23, Swansea, 2.24; in Dukes County, Tisbury, 1.11; in Essex County, Groveland, 1.35; in Franklin County, Charlemont, 2.71, Conway, 2.71, New Salem, 2.01, Orange, 2.67, Rowe, 2.88; in Hampshire County, Ware, 2.53; in Middlesex County, Ashland, 2.53, Hopkinton, 1.69, Littleton, 1.00,

Pepperell, 2.98, Sudbury, 1.33, Westford, 1.01, Wilmington, 2.83; in Norfolk County, Millis, 2.36, Needham, 1.41, Sharon, 2.23; in Plymouth County, Bridgewater, 1.08, Carver, 1.27, Kingston, 2.64, Lakeville, 1.03, Middleborough, 2.62, Plympton, 1.03; in Worcester County, Athol, 2.20, Hardwick, 1.98, Harvard, 1.12, Holden, 2.13, Lunenburg, 1.18, Mendon, 2.67, New Braintree, 2.22, Shrewsbury, 1.15, Upton, 1.77, Westminster, 1.65, Winchendon, 1.49.

The following towns report less than one per cent of abandoned farm land: in Barnstable County, Sandwich; in Berkshire County, Lanesborough; in Bristol County, Attleborough and Mansfield; in Dukes County, Chilmark; in Essex County, Middleton; in Franklin County, Whately; in Hampden County, Russell and Westfield; in Hampshire County, Granby; in Middlesex County, Bedford, Burlington, Holliston, Hudson, and Wayland; in Norfolk County, Franklin and Walpole; in Plymouth County, East Bridgewater; in Worcester County, Boylston, Brookfield, North Brookfield, Uxbridge, and West Brookfield.

*Increase or Decrease of Agricultural Products and Property.*

Has the abandonment of farm land operated to decrease in recent years the aggregate value of agricultural products and property or to decrease the acreage of land under cultivation? The table on page 200, showing the comparative values of agricultural products and property derived from the Censuses of 1875 and 1885, throws some light upon these questions.

The recapitulation on page 210 brings out the facts relative to agricultural products for the State and counties. It appears that every county except Nantucket shows a considerable increase in the aggregate value of agricultural products, the net increase for the State being 28.78 per cent. The loss in the county of Nantucket is 13.11 per cent. This loss is due to local causes which are well understood and need not be rehearsed here. The eastern and more populous counties, as a rule, show the greatest percentages of gain; but the county of Berkshire, which is one of the counties in which a large proportion of abandoned farm land is found, exhibits a gain of 34.62 per cent. The county of Franklin also shows a percentage of growth larger than the average for the State, namely,

30.50. The counties of Hampden and Hampshire show, respectively, an increase of 13.22 per cent and 12.11 per cent. The county of Worcester, in which, as we have seen, a considerable percentage of abandoned farm land exists, exhibits a net gain of 20.48 per cent in the value of agricultural products.

The recapitulation on page 211 shows the increase in the value of agricultural property, the net increase for the State reaching 23.01 per cent, approximating the increase in the value of agricultural products. Every county shows an increase, the eastern counties, as before, leading. But the increase in the western counties is sufficient evidence that for the counties at large, notwithstanding the abandonment of land in certain towns, there has been no falling off in recent years either in the aggregate value of agricultural property, which of course forms the farmer's fixed capital, or in the value of products derived from agriculture as an industry.

Of course in these recapitulations local differences due to peculiar conditions in the towns are lost sight of; and while it is perfectly true, as shown in detail in the table, that some towns show a decline in the value of agricultural products and property, yet this decline is compensated by a considerable increase in other towns in the same vicinity.

As to cultivated land, the facts appear in the table on page 213, recapitulated on page 218. From this recapitulation it is seen that, upon the whole, the acreage of land under cultivation shows a slight increase, namely, 3.28 per cent, for the State at large, subsequent to 1875. Some of the counties, however, show a decrease. In Barnstable this decrease is 2.88 per cent, in Dukes, 19.97 per cent, in Hampshire, 12.02 per cent, in Nantucket, 5.35 per cent, and in Suffolk, 1.81 per cent. The only county in this list which has a considerable portion of abandoned land is the county of Hampshire; the other western counties, namely, Berkshire, Franklin, Hampden, and Worcester all show an increase in the number of acres under cultivation, notwithstanding the existence of the abandoned farms. This increase in the county of Berkshire amounts to 9.57 per cent, in Franklin, 1.90 per cent, in Hampden, 7.66 per cent, and in Worcester, 4.01 per cent. This again shows that, for the counties as a whole, although abandoned farms exist, still

the acreage of cultivated land shows an increase, and that the decline, where it appears, is, as a rule, not in the county showing the largest proportion of abandoned land. This of course points to the conclusion before reached, that, although land is abandoned in certain localities, land under cultivation has increased in other localities in the immediate vicinity, so that when the local differences are eliminated and the county considered as a whole, a net increase appears in cultivated land, in the value of agricultural property, and in the value of the yearly product derived therefrom.

A more thorough enumeration in 1885 than in 1875 possibly accounts for part of the increase shown in certain towns, but, in general, the conclusions derived from these census comparisons may be relied upon.

We may summarize the facts relating to the increase or decrease in the value of agricultural products and property and to the increase or decrease in the acreage of cultivated land for the towns in which abandoned farms exist, as follows :

In Barnstable County three towns are reported containing abandoned farms. Two of these towns show an increase in the value of agricultural products and property, and one a decrease. One of the towns shows an increase in the acreage of land under cultivation, the other two a decrease. Sandwich is the town in which a decrease is shown in each case; but this decrease is partly due to the incorporation of the town of Bourne, set off from Sandwich in 1884. In Berkshire County 18 towns contain abandoned farms. Four of these show a decrease in the value of agricultural products, and 14 an increase. Seven show a decrease in the value of agricultural property, and 11 an increase, while nine show a decrease in the acreage of land under cultivation, and nine an increase. In Bristol County seven towns reporting abandoned farms appear, each of which shows an increase in the value of agricultural products. One town shows a decrease in the value of agricultural property and in the acreage of land under cultivation, while in six an increase is shown.

In Dukes County abandoned farms are shown in three towns. In two of these, however, an increase is found in the value of agricultural products and property and also an increase in the acreage of land under cultivation. In one town an increase is

found in the value of agricultural products, and a decrease in the value of agricultural property and in the acreage of land under cultivation. In Essex County abandoned farms are reported from two towns. In one of these towns we note a decrease in the value of agricultural products and an increase in the value of agricultural property and in the acreage of land under cultivation. The other town shows an increase in the value of agricultural products and a decrease in the value of agricultural property and acreage of land under cultivation. In Franklin County 14 towns report abandoned farms. In two of these is found a decrease in the value of agricultural products, while 12 show an increase. Three towns show a decrease in the value of agricultural property and 11 an increase, while four show a decrease in the acreage of land under cultivation and 10 an increase. In Hampden County, out of 11 towns reporting abandoned farms, three show a decrease in the value of agricultural products, and eight an increase. Four show a decrease in the value of agricultural property, and seven an increase. Five show a decrease in the acreage of cultivated land, and six an increase.

In Hampshire County abandoned farms are found in 14 towns. In five of these is found a decrease in the value of agricultural products, and in nine an increase; in three, a decrease in the value of agricultural property, and in 11 an increase; in nine, a decrease in the acreage of cultivated land, and in five an increase. In Middlesex County abandoned farms appear in 17 towns, in only one of which is found a decrease in the value of agricultural products and property. A decrease in the acreage of cultivated land appears in four towns, and an increase in 13. Abandoned farms are reported from eight towns in Norfolk County, two of which exhibit a decrease in the value of agricultural products. A decrease in the value of agricultural property and cultivated land is found in three towns, and an increase in five towns. In Plymouth County nine towns report abandoned farms. In one of these we find a decrease in the value of agricultural products, and in two a decrease in the value of agricultural property. A decrease in the acreage of cultivated land is found in four towns, and an increase in five. In Worcester County 38 towns report abandoned farms. Of these, six exhibit a decrease in

the value of agricultural products and 31 an increase; five a decrease in the value of agricultural property, and 32 an increase; and 14 a decrease in the acreage of cultivated land, and 23 an increase. Comparisons as to the increase or decrease in the remaining town, Hopedale, cannot be made as it was not incorporated in 1875.

*Changes in Population in Towns reporting Abandoned Farms.*

Of the 144 towns reporting abandoned farms, 86 show a decline in population in 1890 as compared with 1880. Of the towns thus showing a decline, 61 also showed a decline in 1875 as compared with 1865. Sixteen others showed a decline in 1875 as compared with 1865, but exhibit a gain in 1890 as compared with 1880.

To bring out clearly the facts relating to population in the towns containing abandoned farms a closer analysis is necessary. In this analysis it will be understood that we confine our attention to the towns containing abandoned farms. In Barnstable County these towns contained, in 1855, 5,304 inhabitants. Ten years later, at the close of the war, they had declined in population 7.33 per cent; and in 1890 a still further decline is noted, their present population being 3,863, or a decrease of 27.17 per cent since 1855. In Berkshire County, in 1855, the towns had a population of 18,684. In 1865, no material change had taken place. Since that date they have slightly increased, their population in 1890 being 19,903, a gain of 6.52 per cent since 1855. In Bristol County the towns had a population of 15,735 in 1855, which rose to 16,053 in 1865 and to 22,760 in 1890, a gain of 44.65 per cent in thirty-five years, the larger part of which has been made since the close of the war. In Dukes County there has been a uniform decline in population, the towns having 4,401 inhabitants in 1855 and 3,015 in 1890, a loss of 31.49 per cent, although a portion of this is due to the incorporation of Cottage City out of a part of the town of Edgartown.

In Essex County the towns contained a population of 2,247 in 1855, which had risen to 2,541 in 1865 and to 3,115 in 1890, a gain of 38.63 per cent. The population of Franklin County towns, in 1855, was 15,919. In 1865, it had become 14,536, a loss of 8.69 per cent. From 1865 to 1890 a gain of 5.75 per cent



was made, the population now being 15,372. But this is a net loss of 3.44 per cent as compared with 1855. In Hampden County the towns contained 16,933 persons in 1855, 18,034 in 1865, and 21,618 in 1890, the gain in the last year as compared with the first being 27.67 per cent. In Hampshire County the population, in 1855, was 16,705, but during the next ten years the towns declined, the population in 1865 being 15,707, a loss of 5.97 per cent. Between 1865 and 1890 a gain of 10.87 per cent was made, the population now being 17,415, or 4.25 per cent greater than it was in 1855. In Middlesex County the towns have risen from 27,309 in 1855 to 30,292 in 1865 and 44,088 in 1890, a gain of 61.44 per cent. In Norfolk County, also, a considerable gain appears. The population, in 1855, was 14,974, in 1865, 16,171, and in 1890, 20,523, a net gain of 37.06 per cent. Plymouth County towns also show a gain, rising from 17,767 in 1855 to 18,629 in 1865 and 19,120 in 1890, the net gain being 7.62 per cent. In Worcester County the towns had a population of 72,478 in 1855 and gained slightly during the next ten years. Since then, however, they have gained rapidly, the population in 1890 being 98,473, a gain of 35.87 per cent as compared with 1855.

The points brought out in this analysis are presented in the following table :

COUNTIES.	Number of Towns Reporting Abandoned Farms	POPULATION			PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN —		
		1855	1865	1890	1865 as compared with 1855	1890 as compared with 1865	1890 as compared with 1855
Barnstable, .	3	5,304	4,915	3,863	-7.33	-21.40	-27.17
Berkshire, .	18	18,684	18,932	19,903	+1.33	+5.13	+6.52
Bristol, .	7	15,735	16,053	22,760	+2.02	+41.78	+44.65
Dukes, .	3	4,401	4,092	3,015	-7.02	-26.32	-31.49
Essex, .	2	2,247	2,541	3,115	+13.08	+22.59	+38.63
Franklin, .	14	15,919	14,536	15,372	-8.69	+5.75	-3.44
Hampden, .	11	16,933	18,034	21,618	+6.50	+19.87	+27.67
Hampshire, .	14	16,705	15,707	17,415	-5.97	+10.87	+4.25
Middlesex, .	17	27,309	30,292	44,088	+10.92	+45.54	+61.44
Norfolk, .	8	14,974	16,171	20,523	+7.99	+26.91	+37.06
Plymouth, .	9	17,767	18,629	19,120	+4.85	+2.64	+7.62
Worcester, .	38	72,478	72,787	98,473	+0.43	+35.29	+35.87
TOTALS, .	144	228,456	232,689	289,265	+1.85	+24.31	+26.62

It is interesting to compare these percentages of loss or gain in the towns having abandoned farms with the percentages of

loss or gain in the other towns in the counties. In Barnstable County, as we have seen, the loss in the towns containing abandoned farms was 27.17 per cent between 1855 and 1890. The other towns in the county also declined, but not quite so rapidly, the decrease amounting to 16.02 per cent. In Berkshire County, while the towns containing abandoned farms have gained only 6.52 per cent in thirty-five years, the other towns in the county have gained 79.45 per cent. In Bristol County the gain in the towns reporting abandoned farms was 44.65 per cent, while the other towns gained 128.35 per cent. In Dukes County, as a whole, loss appears. In Essex County the towns reporting abandoned farms gained 38.63 per cent, while the other towns in the county gained 99.56 per cent. In Franklin County the towns containing abandoned farms show a loss of 3.44 per cent, while the other towns gained 47.70 per cent. In Hampden County, while the towns containing abandoned farms have gained 27.67 per cent, the other towns gained 200.92 per cent. In Hampshire County the abandoned farm towns gained 4.25 per cent, while the other towns gained 83.41 per cent. In Middlesex County the abandoned farm towns gained 61.44 per cent, while the other towns gained 132.18 per cent. In Norfolk County the gain was 37.06 per cent in the towns reporting abandoned farms, while the other towns in the county gained 23.97 per cent. In Plymouth County the abandoned farm towns gained 7.62 per cent and the other towns gained 68.27 per cent. In Worcester County the towns reporting abandoned farms gained 35.87 per cent, while the other towns gained 136.65 per cent.

These comparisons immediately bring out the fact that, while the towns containing abandoned farms have, in many cases, gained in population, this gain has not at all approached the gain in the other towns in the same counties except in the case of the county of Norfolk.

Some of the towns reporting abandoned farms should hardly be classed as agricultural towns for the reason that the value of the product of manufactures in such towns is greatly in excess of the value of agricultural products. While, upon inspection of the returns relative to abandoned land, it might seem that such towns were in a state of decadence, it is in many cases true that the town is simply in a state of transition respecting its

industries. That is to say, it is passing from a purely agricultural to a manufacturing town. If we classify the towns reporting abandoned farms, according to the preponderance in value of their product, whether of manufactures or of agriculture, classing those as manufacturing towns in which the annual product exceeds in value the value of agricultural products, we arrive at the results as to population, shown in the following table :

COUNTIES, AND CLASSIFICATION OF TOWNS BY PRINCIPAL PRODUCT.	Number of Towns Reporting Abandoned Farms	POPULATION			Percentages of Increase (+), or Decrease(-), in 1890 as compared with 1855
		1855	1865	1890	
BARNSTABLE.					
Manufacturing towns, .	1	3,393	2,972	1,819	—53.61
Agricultural towns, .	2	1,911	1,943	2,044	+6.96
BERKSHIRE.					
Manufacturing towns, .	3	5,175	5,627	11,177	+115.98
Agricultural towns, .	15	13,509	13,305	8,726	—35.41
BRISTOL.					
Manufacturing towns, .	4	9,339	10,075	16,919	+81.17
Agricultural towns, .	3	6,396	5,978	5,841	—8.68
DUKES.					
Manufacturing towns, .	1	1,827	1,698	1,506	—17.57
Agricultural towns, .	2	2,574	2,394	1,509	—41.38
ESSEX.					
Manufacturing towns, .	2	2,247	2,541	3,115	+38.63
Agricultural towns, .	—	—	—	—	—
FRANKLIN.					
Manufacturing towns, .	2	2,491	2,512	5,073	+103.65
Agricultural towns, .	12	13,428	12,024	10,299	—23.30
HAMPDEN.					
Manufacturing towns, .	6	12,194	13,597	18,143	+48.79
Agricultural towns, .	5	4,739	4,437	3,475	—26.67
HAMPSHIRE.					
Manufacturing towns, .	5	7,387	7,241	10,908	+47.66
Agricultural towns, .	9	9,318	8,466	6,507	—30.17

COUNTIES, AND CLASSIFICATION OF TOWNS BY PRINCIPAL PRODUCT.	Number of Towns Reporting Abandoned Farms	POPULATION			Percentages of Increase (+), or Decrease (-), in 1890 as compared with 1855
		1855	1865	1890	
MIDDLESEX.					
Manufacturing towns, .	10	19,268	22,774	36,081	+87.26
Agricultural towns, .	7	8,041	7,518	8,007	-0.42
NORFOLK.					
Manufacturing towns, .	7	14,303	15,500	19,737	+37.99
Agricultural towns, .	1	671	671	786	+17.14
PLYMOUTH.					
Manufacturing towns, .	6	14,393	15,346	16,475	+14.47
Agricultural towns, .	3	3,374	3,283	2,645	-21.61
WORCESTER.					
Manufacturing towns, .	25	54,849	55,916	88,268	+51.81
Agricultural towns, .	13	17,629	16,871	15,205	-13.75

The above table clearly brings out the reasons for growth in certain of the towns containing abandoned farms while others have declined. In the county of Dukes both classes of towns have declined; but in the county of Barnstable the towns in which manufactures lead have decreased 53.61 per cent, while those which depended entirely upon agriculture have increased 6.96 per cent. In Berkshire County the manufacturing towns increased 115.98 per cent, while the agricultural towns declined 35.41 per cent. In Bristol County the manufacturing towns increased 81.17 per cent, while the agricultural towns declined 8.68 per cent. In Essex County the towns reporting abandoned farms are all included in the manufacturing group, and exhibit an increase of 38.63 per cent. In Franklin County the towns in the manufacturing group increased 103.65 per cent, while the other towns declined 23.30 per cent. In Hampden County the manufacturing towns increased 48.79 per cent and the agricultural towns declined 26.67 per cent. In Hampshire County the increase in the manufacturing group was 47.66 per cent, while the agricultural towns declined 30.17 per cent. In Middlesex County the manufacturing towns gained 87.26 per cent, while the agricultural group lost 0.42

per cent. In Norfolk County both classes gained, the gain being 37.99 per cent in the manufacturing towns and 17.14 per cent in the agricultural. In Plymouth County the manufacturing towns gained 14.47 per cent and the agricultural lost 21.61 per cent. In Worcester County the manufacturing towns gained 51.81 per cent and the agricultural lost 13.75 per cent.

It should be borne in mind that, in the above comparisons, we have only considered towns reporting abandoned farms; and when we speak of manufacturing towns we mean, as before stated, only those towns reporting abandoned farms in which manufactures lead agriculture. Of course, none of these towns is largely engaged in manufactures, and they are only to be considered as manufacturing towns as compared with others reporting abandoned farms, whose sole resource is agriculture.

*Comparative Growth in Agriculture and Manufactures.*

The following table presents a comparison respecting agriculture and manufactures in each of the towns reporting abandoned farms in which manufactures out-rank agriculture, and exhibits, also, the growth both in agriculture and manufactures since 1875:

COUNTIES AND TOWNS.	AGRICULTURE [Value of Agricultural Products]		MANUFACTURES [Value of Goods Made and Work Done]		PERCENTAGES: Increase (+), or De- crease (-), in 1886	
	1875	1885	1875	1885	Agri- culture	Manu- factures
<b>BARNSTABLE.</b>						
Sandwich, . . .	\$108,750	\$70,804	\$468,960	\$426,955	-34.89	-8.96
<b>BERKSHIRE.</b>						
Adams, . . .	169,486	154,017	7,936,308	3,702,943	-9.13	-53.34
Becket, . . .	99,389	98,095	300,017	109,877	-1.30	-63.38
Lanesborough, .	119,387	148,011	306,250	254,634	+23.98	-16.85
<b>BRISTOL.</b>						
Attleborough, .	176,126	309,331	3,111,623	6,241,757	+75.63	+100.59
Easton, . . .	90,160	137,112	1,639,420	1,018,239	+52.08	-37.89
Freetown, . . .	82,038	83,787	59,321	105,601	+2.13	+78.02
Mansfield, . . .	48,541	140,266	495,678	993,732	+188.96	+100.48
<b>DUKES.</b>						
Tisbury, . . .	45,154	77,369	22,299	111,068	+71.34	+398.06

COUNTIES AND TOWNS.	AGRICULTURE [Value of Agricultural Products]		MANUFACTURES [Value of Goods Made and Work Done]		PERCENTAGES: Increase (+), or Decrease (—), in 1886	
	1875	1885	1875	1885	Agri- culture	Manu- factures
<b>ESSEX.</b>						
Groveland, .	\$68,814	\$68,281	\$578,141	\$1,281,115	—0.77	+121.59
Middleton, .	53,896	77,783	273,929	259,039	+44.32	—5.44
<b>FRANKLIN.</b>						
Orange, .	75,817	193,861	720,752	1,285,253	+155.70	+78.32
Wendell, .	41,076	49,707	60,746	73,396	+21.01	+20.82
<b>HAMPDEN.</b>						
Chester, .	92,921	105,304	164,729	247,146	+13.33	+50.03
Monson, .	189,616	200,854	1,133,929	952,582	+5.93	—15.99
Russell, .	30,579	44,433	162,054	420,680	+45.31	+159.59
Wales, .	43,748	39,810	807,681	290,300	—9.00	—64.06
Westfield, .	324,018	446,093	3,077,105	3,009,048	+37.68	—2.21
Wilbraham, .	258,874	143,818	861,430	644,622	—44.44	—25.17
<b>HAMPSHIRE.</b>						
Cummington, .	95,317	91,009	97,764	93,782	—4.52	—4.07
Enfield, .	99,422	75,118	332,465	231,527	—24.45	—30.36
Huntington, .	74,480	98,764	101,886	230,024	+32.60	+125.77
Middlefield, .	57,906	71,675	86,687	94,400	+23.78	+8.90
Ware, .	171,753	191,680	1,747,867	3,430,620	+11.60	+96.27
<b>MIDDLESEX.</b>						
Ashland, .	59,282	80,604	1,059,254	1,261,358	+35.97	+19.08
Holliston, .	90,404	112,319	1,094,340	829,583	+24.24	—24.19
Hopkinton, .	90,588	145,924	1,663,585	1,670,018	+46.63	+0.39
Hudson, .	87,458	94,523	1,796,102	2,247,773	+8.08	+25.15
Marlborough, .	166,471	232,514	3,002,881	6,417,617	+39.67	+113.72
North Reading, .	69,643	103,269	129,528	105,997	+48.28	—18.17
Pepperell, .	173,959	132,118	523,626	1,158,993	—24.05	+121.34
Stow, .	132,927	144,332	294,732	244,992	+8.58	—16.88
Westford, .	140,219	180,136	438,894	1,020,752	+28.47	+132.57
Wilmington, .	48,582	76,006	93,221	214,518	+56.45	+130.12
<b>NORFOLK.</b>						
Bellingham, .	83,944	91,445	486,188	419,412	+8.94	—13.73
Franklin, .	127,572	165,371	1,134,746	1,278,467	+29.63	+12.67
Needham, .	139,785	132,275	1,383,254	377,247	—5.37	—72.73
Norwood, .	32,476	70,146	432,220	1,038,318	+115.99	+140.23
Sharon, .	75,940	70,006	250,874	128,208	—7.81	—48.90
Wrentham, .	70,638	193,787	376,299	429,025	+174.34	+14.01
Walpole, .	98,860	117,381	618,482	1,352,192	+18.73	+118.63
<b>PLYMOUTH.</b>						
Bridgewater, .	107,132	141,378	927,639	769,945	+31.97	—17.00
Carver, .	56,131	105,791	178,191	120,156	+88.47	—32.57
East Bridgewater, .	73,908	65,956	358,100	446,183	—10.76	+24.60
Kingston, .	32,206	58,391	268,738	308,837	+81.30	+14.92
Middleborough, .	260,676	306,581	1,426,999	1,291,129	+17.61	—9.52
Plympton, .	34,470	53,734	37,277	83,989	+55.89	+125.31

COUNTIES AND TOWNS.	AGRICULTURE [Value of Agricultural Products]		MANUFACTURES [Value of Goods Made and Work Done]		PERCENTAGES: Increase (+), or De- crease (-), in 1885	
	1875	1885	1875	1885	Agri- culture	Manu- factures
<b>WORCESTER.</b>						
Ashburnham, .	\$100,222	\$111,454	\$498,816	\$418,815	+11.21	-16.04
Athol, . . .	92,754	143,653	1,239,246	1,323,948	+54.88	+6.83
Brookfield, .	119,661	189,187	730,569	1,216,746	+58.10	+66.55
Charlton, . .	196,477	265,657	141,205	476,131	+35.21	+237.19
Clinton, . .	10,594	33,154	3,614,548	3,624,663	+212.95	+0.28
Dana, . . .	65,217	65,904	103,134	71,169	+1.05	-30.99
Douglas, . .	66,720	78,451	626,348	519,880	+17.58	-17.00
Dudley, . .	103,337	155,395	1,193,669	1,316,112	+50.38	+10.26
Holden, . .	127,152	173,575	519,964	403,059	+36.51	-22.48
Hopedale,* .	-	-	-	-	-	-
Leicester, . .	95,984	159,518	1,401,298	1,257,264	+66.19	-10.28
Leominster, .	210,534	188,734	1,847,493	1,668,157	-10.35	-9.71
North Brookfield,	107,085	148,703	1,838,728	2,741,367	+38.86	+49.09
Oxford, . . .	130,300	139,419	1,078,195	480,055	+7.00	-55.48
Royalston, . .	84,636	133,144	199,866	295,388	+57.31	+47.79
Shrewsbury, .	147,030	175,616	412,261	263,171	+19.44	-36.16
Southbridge, .	134,739	102,206	3,186,998	1,968,107	-24.15	-38.25
Sturbridge, .	133,394	125,152	597,816	384,787	-6.18	-35.63
Sutton, . . .	187,558	173,543	676,926	699,961	-7.47	+3.40
Upton, . . .	92,347	128,648	828,568	1,126,040	+39.31	+35.90
Uxbridge, . .	188,009	193,887	918,838	718,158	+3.13	-21.84
Warren, . . .	172,735	153,168	1,333,170	1,651,564	-11.33	+23.88
West Brookfield, .	112,474	144,249	577,951	309,498	+28.25	-46.45
Westminster, .	126,485	193,931	189,875	283,462	+53.32	+49.29
Winchendon, .	79,418	89,664	968,948	1,316,420	+12.90	+35.86

\* Comparisons cannot be made as the town was not incorporated in 1875.

Of the towns represented in the foregoing table the following show a decline both in agricultural and manufacturing products since 1875: Sandwich, Adams, Becket, Wales, Wilbraham, Cummington, Enfield, Needham, Sharon, Leominster, Southbridge, and Sturbridge. The loss in Sandwich and Adams is principally due to loss of territory caused by the incorporation of the town of Bourne, from Sandwich, and the town of North Adams, from Adams, during the decennial period ending in 1885. An increase in agriculture and a decline in manufactures is shown in the following towns: Lanesborough, Easton, Middleton, Monson, Westfield, Holliston, North Reading, Stow, Bellingham, Bridgewater, Carver, Middleborough, Ashburnham, Dana, Douglas, Holden, Leicester, Oxford, Shrewsbury, Uxbridge, and West Brookfield. The following towns show an increase in manufactures and a decline in agriculture: Groveland, Pepperell, East Bridgewater, Sutton, and Warren.

The following towns exhibit increases both in agriculture and manufactures: Attleborough, Freetown, Mansfield, Tisbury, Orange, Wendell, Chester, Russell, Huntington, Middlefield, Ware, Ashland, Hopkinton, Hudson, Marlborough, Westford, Wilmington, Franklin, Norwood, Wrentham, Walpole, Kingston, Plympton, Athol, Brookfield, Charlton, Clinton, Dudley, North Brookfield, Royalston, Upton, Westminster, and Winchendon. Manifestly the abandonment of farm land can have had little effect in such towns on their agricultural and other interests.

In the towns which show an increase in manufactures with a decline in agriculture it is probably true, that, in some cases, the presence of factory industries affording employment comparatively regular and remunerative, unexposed to the changes of the seasons and relatively more desirable than agriculture, has drawn somewhat upon farming as an industry.

It is well known that the aggregate value of product turned out in the manufacturing industries in Massachusetts is largely in excess of the product derived from agriculture. The exact relation which these industries bear to each other, as shown by the relative increase or decrease in their annual product, is not so well understood. For the purpose of comparing the increase in the value of manufactured goods with the increase in the value of the product of agriculture, as shown by the State Censuses of 1875 and 1885, the following table is introduced:

THE STATE, AND COUNTIES.	MANUFACTURES [Value of Goods Made and Work Done]		PERCENTAGES: Increase (+), or Decrease (-), in 1885
	1875	1885	
THE STATE.	\$528,868,634	\$674,634,269	+27.56
Barnstable, . . . .	1,367,688	2,513,206	+83.76
Berkshire, . . . .	18,763,596	21,105,616	+12.48
Bristol, . . . .	45,624,187	52,670,730	+15.44
Dukes, . . . .	92,469	149,071	+61.21
Essex, . . . .	83,466,736	119,168,189	+42.77
Franklin, . . . .	4,733,815	6,418,958	+35.60
Hampden, . . . .	31,867,884	42,609,234	+33.71
Hampshire, . . . .	9,640,674	12,138,065	+25.90
Middlesex, . . . .	92,040,402	128,599,892	+39.72
Nantucket, . . . .	155,342	126,619	-18.49
Norfolk, . . . .	24,022,360	28,824,100	+19.99
Plymouth, . . . .	18,384,049	27,819,116	+51.32
Suffolk, . . . .	125,723,086	149,281,727	+18.74
Worcester, . . . .	72,986,346	83,209,746	+14.01



From the preceding table it appears that the increase in manufactures, as represented by the increase in the value of goods made and work done in 1885 as compared with 1875, for the State as a whole, was 27.56 per cent. If we refer to the recapitulation on page 210 we shall find that the increase in the value of agricultural products was 28.78 per cent. That is to say, there was a greater increase in the aggregate value of the product of agriculture turned out in a single year than in the aggregate value of the product turned out in manufactures. It will be understood that we now make no inquiry as to the relative profits in manufactures and agriculture, but simply determine the relative growth of the industries so far as it can be measured by the aggregate annual product value derived from each.

In Barnstable County the increase in manufactures, measured by the increase in the value of product, was 83.76 per cent, while in agriculture the increase was 71.98 per cent. The increases in the other counties range as follows: Berkshire, manufactures 12.48 per cent, agriculture 34.62 per cent; Bristol, manufactures 15.44 per cent, agriculture 41.64 per cent; Dukes, manufactures 61.21 per cent, agriculture 58.72 per cent; Essex, manufactures 42.77 per cent, agriculture 47.89 per cent; Franklin, manufactures 35.60 per cent, agriculture 30.50 per cent; Hampden, manufactures 33.71 per cent, agriculture 13.22 per cent; Hampshire, manufactures 25.90 per cent, agriculture 12.11 per cent; Middlesex, manufactures 39.72 per cent, agriculture 28.72 per cent. In Nantucket the decline in manufactures was 18.49 per cent and in agriculture 13.11 per cent. The remaining counties each show increases as follows: Norfolk, manufactures 19.99 per cent, agriculture 44.74 per cent; Plymouth, manufactures 51.32 per cent, agriculture 25.99 per cent; Suffolk, manufactures 18.74 per cent, agriculture 82.17 per cent; Worcester, manufactures 14.01 per cent, agriculture 20.48 per cent. The rate of increase in the value of agricultural products was greater than that in the value of manufactured products, not only for the State at large, but also in six of the counties. In one county a decline is exhibited both in agriculture and in manufactures, but the decline in the value of manufactured product is greater than that shown in the other industry. In the seven remaining

counties the increase in the product of manufactures was greater than the increase in the product of agriculture, but the inequality is no greater than is shown upon the other side, in the counties in which agriculture leads.

Percentages of increase in the value of agricultural property, shown in the recapitulation on page 211, when compared with the percentages of increase in the value of manufactured products, show very similar results. In the following table the percentages of increase or decrease in agricultural products and property and cultivated land are brought forward and placed in comparison with the percentages of increase or decrease in the value of goods made and work done :

THE STATE, AND COUNTIES.	PERCENTAGES OF INCREASE (+), OR DECREASE (-), IN 1886 AS COMPARED WITH 1875, IN —			
	Acreage of Cultivated Land	Value of Agricultural Property	Value of Agricultural Products	Value of Manufactured Products
THE STATE.	+3.28	+23.01	+28.78	+27.56
Barnstable, . . . .	-2.88	+102.82	+71.98	+83.76
Berkshire, . . . .	+9.57	+26.89	+34.62	+12.48
Bristol, . . . . .	+10.44	+31.74	+41.64	+15.44
Dukes, . . . . .	-19.97	+42.95	+58.72	+61.21
Essex, . . . . .	+4.87	+45.11	+47.89	+42.77
Franklin, . . . . .	+1.90	+12.84	+30.50	+35.60
Hampden, . . . . .	+7.66	+13.70	+13.22	+33.71
Hampshire, . . . .	-12.02	+8.71	+12.11	+25.90
Middlesex, . . . .	+3.43	+17.37	+28.72	+39.72
Nantucket, . . . .	-5.35	+19.42	-13.11	-18.49
Norfolk, . . . . .	+8.13	+43.02	+44.74	+19.99
Plymouth, . . . .	+0.11	+28.26	+25.99	+51.32
Suffolk, . . . . .	-1.81	+81.85	+82.17	+18.74
Worcester, . . . .	+4.01	+13.63	+20.48	+14.01

The uniformity of growth in agriculture and manufactures, as indicated by a comparison of the rates of increase in the value of annual product, to which we have alluded before, is shown by comparisons of the percentages contained in the last two columns of the above table. The second column shows the percentages of increase in the value of agricultural property, and, of course, has no direct relation to the other two. It is an interesting fact, however, that the percentage of increase in the value of agricultural property for the State at large closely approaches the percentage of increase in the value of product

in both industries; and for many of the counties a similar uniformity may be noticed.

The first column, relating to the percentages of increase or decrease of cultivated land, when brought into comparison with the others, requires some explanation. It will be observed, that, in several cases, a decrease in the acreage of cultivated land is accompanied by an increase in the value of agricultural products and property. This, of course, shows a higher cultivation of land remaining under tillage than was formerly the case. That is to say, the farmers, in many cases, are tilling a proportionately less amount of land, but are improving their methods of cultivation, so that there is an increase in property values and in the value of the annual product, notwithstanding a net decrease in cultivated acreage. The large percentages of increase in property and products in the county of Barnstable are due almost entirely to the development of the cultivation of the cranberry, which in recent years has assumed large proportions. In Suffolk County the large percentages of increase are due, partly to the annexation of suburban districts to the city of Boston from other counties, and partly to the development of truck farming for the supply of the city market.

#### *Tax Rates in Towns Reporting Abandoned Farms.*

The rate of taxation varies considerably in different sections of the State. This rate is an important factor in industrial progress or decline. It will be understood, of course, that we allude to direct taxation. Is the rate excessive in the towns reporting abandoned farms, or do these towns suffer under rates higher than those usual in the counties of which they form part?

With the method usually prevailing in Massachusetts the rate per \$1,000 depends largely upon the action of the assessors, who, in fixing the valuation, virtually establish the rate. Unfortunately, differences of judgment or of procedure on the part of the assessors lead to inequalities in valuation between different towns, and, therefore, to unequal taxation, even where the rates per \$1,000 are substantially uniform. As long as the valuation is fixed by local boards of assessors, whose jurisdiction is limited to the town in which they act, absolute uniformity in valuation is out of the question. In the official returns it is

impossible to eliminate differences in assessment, and we can only base our conclusions upon comparisons of the rates.

The average rate of taxation for the State at large, in 1890, was \$14.84 per \$1,000 of assessed valuation. In the towns reporting abandoned farms, 62 have a rate of taxation in excess of the average for the State, while 82 have a less rate.

In Barnstable County the average rate was \$10.92. In two of the towns reporting abandoned farms the rate was higher than this, and in one a lower rate prevails. In Berkshire County the average rate was \$14.75. The rate in the towns reporting abandoned farms was higher than this in nine instances and lower in nine. In Bristol County the average rate was \$15.80. Two of the towns reporting abandoned farms have a higher rate, while in five the rate is lower. In Dukes County the average rate was \$14.40. Of the towns reporting abandoned farms, two have a higher rate and one a lower rate. In Essex County the average rate was \$14.71. One of the towns reporting abandoned farms has a higher and one a lower rate. In Franklin County the average rate was \$14.05. Ten of the towns reporting abandoned farms have a higher rate, while in only four is a lower rate found. In Hampden County the average rate was \$13.76. In eight of the towns reporting abandoned farms the rate was higher than this average and in three towns a lower rate is reported. In Hampshire County the average rate was \$15.21. Seven of the towns reporting abandoned farms have a higher rate and seven a lower rate. In Middlesex County the average rate was \$15.03. In five of the towns reporting abandoned farms a higher rate prevails and in 12 a lower rate. In Norfolk County the average rate was \$11.65. A rate higher than this average is found in six of the towns reporting abandoned farms, while in two towns the rate is below the average. In Plymouth County the average was \$13.65. But one of the towns reporting abandoned farms has a higher rate than this, while eight towns have a lower rate. In Worcester County the average rate was \$15.36. Thirteen of the towns reporting abandoned farms have a higher rate and 25 a lower rate.

The following table shows the classification of tax rates per \$1,000 of valuation for the towns reporting abandoned farms, by counties and for the State :

CLASSIFICATION OF TAX RATES PER \$1,000.	COUNTIES											THE STATE	
	Barnstable	Berkshire	Bristol	Dukes	Essex	Franklin	Hampden	Hampshire	Middlesex	Norfolk	Plymouth		Worcester
Less than \$10, .	-	1	2	-	-	-	-	1	2	-	3	3	12
\$10 but under \$12, .	2	2	-	-	-	3	2	2	5	2	3	5	26
\$12 but under \$14, .	-	5	1	1	1	1	1	3	4	4	3	9	33
\$14 but under \$16, .	1	5	2	2	-	1	3	1	1	1	-	11	28
\$16 but under \$18, .	-	1	2	-	1	5	2	6	2	1	-	7	27
\$18 but under \$20, .	-	2	-	-	-	1	2	1	2	-	-	3	11
\$20 or over, .	-	2	-	-	-	3	1	-	1	-	-	-	7
TOTALS, .	3	18	7	3	2	14	11	14	17	8	9	38	144

It is apparent from the preceding table that seven of the towns reporting abandoned farms have a tax rate in excess of \$20. Eleven others have a rate under \$20, but in excess of \$18. Twelve have a rate less than \$10, while the remaining towns are very uniformly distributed in the classes between \$10 and \$18.

### *Causes for Abandonment of Farms.*

The abandonment of farming land is not entirely of recent date, although it is still going on. Replies respecting this phase of the subject, made to the Secretary of the Board of Agriculture\* from 77 different localities, indicate that in 43 of these the number of abandoned farms is no greater than existed ten years ago; in 25 the number was considered greater, in five it was believed to be less, while in four instances the replies indicated conditions similar to those prevailing at the earlier date.

The following language may be thought appropriate to the present day:

“Every intelligent man or woman sees it,† and there is not a public speaker but what refers to it, deprecates it, and offers his antidote. You have only to look before you to see it. Where are the once prosperous families that occupied the farms above the foundry village? Where

\* 37th Report of the Board, p. xvii.

† Alluding to the decline of rural New England.

are the 28 families that lived in thrift on Catamount Hill with their dairies and stock, and their 90 scholars, when I came to this town? Except now and then a single family, holding on like a shipwrecked mariner to a lonely rock in the great ocean, all are gone. Where is that long line of noble farmers that were so industrious and prosperous, extending from North River over Christian Hill to the Green Mountains, and those cattle drovers and merchants that did more business than all the stores in a half-dozen western towns to-day? All are gone. \* \* \* \* \* Look over this town, and see the once expensive private dwellings going to ruin in strange hands. They show that far back a high order of architecture existed here, and that a wealthy and prosperous set of farmers and mechanics occupied them. They are now in decay. The same thing may be seen, in a greater or less degree, in most of the rural districts of New England."

However appropriate this may now appear, it was written 33 years ago, and formed part of an address delivered to his neighbors by a citizen of western Massachusetts.

If the evil is not recent, neither is it local. It is not confined to Massachusetts, to New England, to the West, wherein, it is said, more farms have been deserted by their owners than in the East, nor to the United States. It is one of the features of modern civilization. While it is possible to accept that civilization as, upon the whole, good, no one, unless ultra-conservative, can accept it as a finality, or refuse to recognize the evils peculiar to it.

It is not necessary to enlarge upon the causes which have led to the abandonment of farming land. No single cause can be given. If it were otherwise a remedy might be easily suggested. There are many factors which have contributed to the result, either directly or indirectly. Some of these affect the present industrial system and are subjects of controversy not yet settled, and therefore not open to extended consideration in this Report which is mainly devoted to the presentation of evidence, and not at all to theoretical argument. Among others, however, which admit of no dispute are the inadaptability of some of the land to the use of machinery and modern modes of cultivation, the poorer quality of the soil in one locality as compared with that in another, or its remoteness from markets or from the railway which communicates with markets; and

beyond these, everything which has aided the growth of cities has at the same time tended to reduce the population of the remote towns. The partial desertion of the once thriving villages, that were the centres of the idyllic New England life of the past, touches our sentiments and arouses our emotions. But the matter must be viewed from quite another stand-point than that of sentiment.

It must be remembered that the abandonment of farming land does not always imply either the abandonment or the decline of agriculture. On the contrary, notwithstanding this decline in some sections, an increase in other sections appears. A careful study of the tables relative to agricultural products and property will show that the increase is generally greatest in the vicinity of the large towns. These towns afford a ready market for perishable products, and this fact has led to a gradual change in the agriculture of the State, which, developing along the lines of easiest resistance, has found its greatest profits in the products of the market garden and the dairy. Of this sort of agriculture there is considerable within the territorial limits of the cities themselves. The farmer near the large towns has frequently an advantage over those in the remote places, in his ability to sell his crops directly without the intervention of the middleman. There are economic reasons, therefore, growing out of the changed conditions of modern life, which have operated to draw some who have not yet abandoned agriculture into the proximity of cities.

Every new census discloses a larger proportion of our population within city limits, and nothing provokes more criticism than the failure of a city or large town to maintain in the census returns its expected percentage of growth. This growth is considered an evidence of progress, but it should be remembered that rapid growth in cities cannot be secured without retarding the growth in the country districts. In Massachusetts the immigrant seeks the city and factory town. Often he comes from an agricultural life and desires a change. A movement from the city toward the country would perhaps correct the evil of abandoned farms, but it would also check the growth of the city. In the present state of public opinion, which is largely controlled by the cities and will be so controlled to a still greater extent in the future, any such movement, if extensive

enough to be effective, would at once be regarded as evidence of decadence in the cities affected by it.

The larger towns and cities are constantly engaged in organized efforts to attract population by the introduction of new industries, by improving their systems of water supply and drainage, by increasing the efficiency of their public schools, by the establishment of public libraries and parks, — that is, by making it possible to improve one's pecuniary position by residence within them, through the opportunity afforded for regular and remunerative employment, not like agriculture subject to the contingencies of the seasons, and by enlarging the social advantages which are to-day deemed essential. Such efforts are considered commendable. It ought to be recognized however that their success involves a drain upon less favored municipalities.

The concentration of population and wealth in cities and large towns, while it has its dangers, unquestionably opens enlarged social opportunities to all classes, even the poorest. There is, too, a strange fascination in city life which has always existed, and which leads many who are under its spell to prefer poverty and privation in the city to independence and comfort in the country. This fascination is intensified by the undoubted benefits which the modern city offers to those within or near it.

The delights of a country life and the independence of the farmer are prolific themes of poets everywhere. Unfortunately, the masses of the people have usually, for various reasons, declined to take the same view. No doubt the poets are right, but men have to be raised above the ordinary level to enable them to accept such a conclusion. It is probably the existence of conditions more or less artificial that makes a city life seem preferable to so many, but these conditions have prevailed so long, and tend in so many ways to perpetuate themselves, that they cannot at once be changed.

And yet it must be admitted that the promise which leads to the abandonment of country life is frequently unfulfilled. The movement from the country toward the city may affect, indeed has affected, the labor market in two ways: it may lead to a dearth of agricultural labor in the depleted districts, thus adding to the burdens which in too many cases the farmer already



bears, and it may intensify the competition to which the city laborer is subjected, both as to employment and as to wages. This competition re-acts upon those who come to the city for the purpose of improving their fortunes only to find the opportunities open to them constantly growing less. On the other hand, the life of the farmer, notwithstanding its burdens, was never so easy in many respects as at present. The farms of New England have in the past nurtured strong and brave men, but it was not because of any specially favorable economic conditions. It was the New England character, the New England home life, the New England respect for the church and school, which, frequently in the face of adverse circumstances, developed the New England citizen. It could be easily shown that the hardships and poverty among farmers in the early part of the century were much greater than they are to-day. The improvements due to modern invention have lightened farm labor, while the railroad, the telegraph, and the press have brought the most retired farms into communication with the activities of the age. The farmer may not be able to amass wealth, nor can the majority of those in cities hope to do so. He is generally sure of a comfortable living as the reward of his toil, and the contingencies that affect his employment are usually no greater than those affecting employment in cities. If opportunities for large profits are not open to him, he is relieved from the risk incidental to such opportunities. That some of the burdens under which he suffers might be and ought to be removed is undeniable, but there are those in the city, working for low wages, liable to periodical unemployment, to whom life upon the abandoned farms would offer an agreeable change; only they must first be convinced that such a change is desirable.

#### *Can the Abandoned Farms be Reclaimed?*

It is sometimes assumed that there are many in our cities who would gladly go back to the land, if land were obtainable. This report shows that such land exists. Much of it is in towns which for natural beauty of scenery and healthfulness of situation are unsurpassed in Massachusetts. These towns have an honorable past and still possess possibilities of growth. In many of them, as we have shown, agriculture still flourishes,

and, presumably, many of the abandoned farms could be brought back to fertility, and become once more the sites of prosperous and happy homes. If this could be accomplished it would be a public benefit. Can legislation afford any aid?

Many of the towns containing abandoned farms have small opportunity, compared with that possessed by the larger places, to make their advantages known. These advantages are by no means inconsiderable. Some of the abandoned land is no doubt rocky and poor, but it is not all of this class. In some cases, where its reclamation for agricultural purposes is impracticable, it could be developed for summer residence by those who would be glad to avail themselves of it, if its exact condition were known. Occupancy of this sort would be of benefit to the town inviting it. For most of the land the price is low, and probably much of it could be bought for occupation at a small outlay in cash.

The States of New Hampshire and Vermont have undertaken to colonize their abandoned land, which is more extensive than exists in Massachusetts, and have invited immigration especially to that end. Whether or not such a plan could be permanently successful here is problematical. It is, of course, doubtful if immigrants who are led to take up this land can withstand the inducements constantly tending to draw them away to the larger towns. To prefer the country to the city requires a certain point of view which experience has everywhere shown is not likely to be taken by those who would be most benefited by the change. To reclaim the abandoned land requires not only the choice of the country life, but involves hard labor and that self-denial which prefers possible permanent future advantage to present temporary gain.

So far as the abandonment of farming land proceeds from natural causes, or is the result of other than local conditions, legislation in a single State can accomplish little, but this at least might be done:—Full information might be collected as to the fertility of the abandoned farms, their prices, the terms upon which they can be bought for occupation, their distance from markets or from the railroad, and as to the sanitary, educational, and social conditions prevailing in the towns containing them, and some sort of avenue of communication established between those holding this land, and those who may

desire to occupy it. Such work as this is not within the province of this Bureau, but it might be undertaken by the State through appropriate agencies. It would be the first step toward the reclamation of the abandoned land, and a step which it seems must be taken under the patronage of the State, if it is taken at all.

In the following summary, we recapitulate the salient points brought out in the investigation :

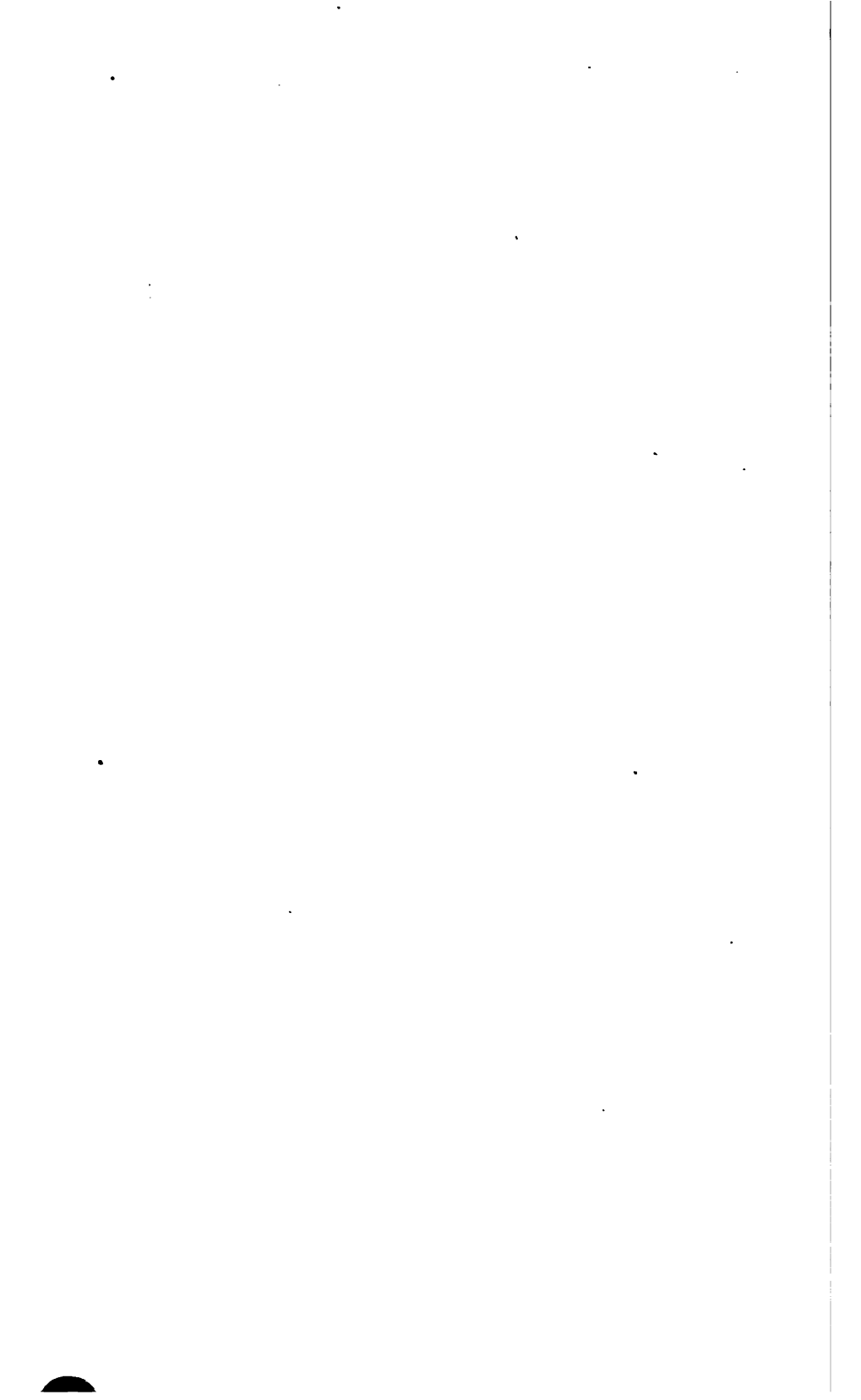
*Abandoned farm land in Massachusetts is principally confined to the western counties. Such land aggregates 3.45 per cent of the total farm acreage of the State, outside the limits of cities, and about 0.87 per cent of the value of such farm land. In Nantucket and Suffolk counties no abandoned farm land is returned. The percentage of acreage of abandoned farm land of total farm acreage, for the counties returning abandoned farm land, is highest in Hampshire County, reaching therein 6.85 per cent. It is lowest in Essex County, being therein only 0.06 per cent.*

*The average size of abandoned farms with buildings is 86 acres and for those without buildings 87 acres. The average value of abandoned farms with buildings is \$894 and for those without buildings \$561. The average value of buildings on abandoned farms is \$337 per farm, ranging much less than the average value of buildings upon farms under cultivation. Much of the abandoned land may be bought for less than \$10 per acre.*

*While some of the towns containing abandoned farms show a recent decline in the value of agricultural products and property, this is not universally true and the decline in certain localities is overbalanced by increase in others in the same county, so that, notwithstanding the existence of abandoned farms, each county except Nantucket shows an increase since 1875 in the value of agricultural products and every county shows an increase in the value of agricultural property. In some counties, also, an increase in the acreage of land under cultivation appears.*

*Except in Barnstable and Dukes counties the towns reporting abandoned farms show an aggregate increase in population*

*since 1865, and, except in Barnstable, Dukes, and Franklin counties, an increase since 1855. The increase is not usually so great, however, as appears in the other towns in the counties respectively. In the towns containing abandoned farms, and having no important manufacturing industries, a decline in population generally appears. The exception is in Middlesex and Norfolk counties, in which, however, the proportion of abandoned farm land is small.*



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PART IV.

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NET PROFITS IN MANUFACT-  
URING INDUSTRIES.

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## PART IV.

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# NET PROFITS IN MANUFACTURING INDUSTRIES.

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The question, "What are the rightful shares of labor and capital in the product to which each has contributed?" has been frequently asked and many persons have assumed to answer. Before theorizing upon the subject it would be well if the proportional amounts received by each were definitely known. When these amounts are discovered they may be compared, and whether or not the present relations of wages and profits are just may, perhaps, be determined. The statistics of wages have been quite fully gathered and published in this and other States and in foreign countries. The amount of profit received by capital has been disclosed to some extent; but the results have nearly always been confined to "gross profits," or the difference between the selling price on the one hand and the combined cost of raw materials and labor on the other. In such presentations no account has been taken of other expenses which reduce gross profit until only net profit remains. To show the *net profits* in 64 manufacturing industries, covering 10,013 establishments and representing 69.21 per cent of the total value of products manufactured annually in this Commonwealth, is the object of this Part.

The workman depends upon his wages for his subsistence, while the employer's income is derived from that portion of the product which remains after wages are paid. The workman's contribution to the productive enterprise is his ability to work either with hand or head or both. The employer furnishes money, or credit, which is equivalent to money, and the mental



ability required to supervise the business. The workman expects that his work shall be conducted under proper sanitary conditions, and that proper safeguards shall be used to protect him against accidents, and in these matters the law requires the employer to take such precautions as may be necessary. The employer must also, during the process of manufacture, supply raw materials, provide for wages and salaries, rent, insurance rates, and other incidental charges. To secure the most intelligent and productive labor he must pay good wages; and, frequently, under stress of competition, that he may meet the lowest market price, he feels it necessary to speed his machinery and his employes in order that, notwithstanding the high rate of wages paid, the relative cost of production may be, as far as practicable, reduced. While the workman receives a stated sum for his day's work, the employer is not sure of a fixed return for his investment and services; and sometimes a year of good business and consequent large profits will barely offset the poor business and attendant losses of other years. These considerations all affect the conclusions that may be drawn as to the equitable distribution of the results derived from the joint enterprise in which labor and capital are engaged.

We have mentioned labor and capital as the two parties engaged in production. It will be understood that we speak in a general, not in a technical or scientific sense. By "Labor" we mean the working force, either operatives or manual workers. By "Capital" we mean the employers or directors of this force. Frequently, under the modern organization of industry, the direct employers are not capitalists, that is they do not own the money or its equivalent invested in the business. This is nearly always the fact in a manufacturing corporation wherein the stockholder is the real capitalist and the direct employer is the agent or superintendent. In the tables, of course, and in the analysis which accompanies them, we use the word "Capital" in a technical sense; and, to prevent misunderstanding as to that and other terms which are variously used and defined by economists, and which we have generally used in the ordinary, instead of any restricted or scientific sense, we define the meaning to be attached to them in this Part as follows:

*Capital.* Material means of production without regard to their origin, including land. The details of capital are also given separately; namely, values of land, buildings, fixtures, machinery, implements and tools, cash, and credit capital supplied by partners or stockholders, or in the nature of bills payable, accounts on long time, etc. If in any discussion, based upon the results of this Part, it is desired to separate land values from the aggregate capital, upon the theory that land should not be classed as capital, it may of course be done.

*Stock Used.* Materials consumed in the process of manufacture, whether entering into the fabric manufactured or in the form of supplies necessary to the process or required to prepare the product for the market, such as coal, gas, dyes, barrels, boxes, etc.

*Salaries.* Amounts paid for services other than to operatives and manual workers; i. e., for superintendents, clerical services, etc.

*Wages.* Amounts paid to operatives and manual workers.

*Rent.* Amounts paid for mills, factories, workshops or other premises hired for conducting the manufacture, storage purposes, etc.

*Interest.* Compensation allowed for the cash invested, equivalent to loan interest if this cash were borrowed.

As presented in the State Census of 1885, all the manufactured products of the Commonwealth were classified under 83 industry heads. In arranging the various manufacturing industries for presentation as regards net profits, it has been deemed advisable to combine certain industries with others, thus reducing to 64 the number of industry designations. The principal reason for these condensations has been to so conceal the individual establishment or small industries as to remove any possibility of disclosing the private affairs of individual firms or corporations. The purposes of the investigation are fully gained by securing general results, and for this reason no amounts are given in the industry tables which follow except as regards capital invested and value of goods made and work done, or the selling price. For all other points, the results obtained are shown by percentages which are fully as indicative and which avoid unnecessary disclosures of the actual amounts involved.

The following table presents, for the 64 industries, first, the whole number of establishments in each industry; second, the number of establishments *not* reporting as to net profits; third, the number of establishments reporting as to net profits, with subdivisions which show the respective number of establishments making a profit, or *not* making a profit; fourth, a presentation on the basis of percentages, showing, for each industry, the respective percentages of establishments making a profit, *not* making a profit, or not answering as regards net profits. In this table can also be seen the industry condensations previously referred to, which reduced the classification from 83 to 64 industry designations.

INDUSTRIES.	Whole Number of Establishments	Number of Establishments not Reporting as to Net Profits	Number of Establishments Reporting as to Net Profits	NUMBER OF ESTABLISHMENTS—		PERCENTAGES OF ESTABLISHMENTS—		
				making a profit	not making a profit	making a profit	not making a profit	not answering
Agricultural implements, . . . . .	80	12	18	15	3	50.00	10.00	40.00
Arms and ammunition, . . . . .	40	18	22	19	3	47.50	7.50	45.00
Artificial teeth and dental work, . . . . .	489	369	120	103	17	21.06	3.48	75.46
Artisans' tools, . . . . .	140	63	77	69	8	49.29	5.71	45.00
Boots and shoes, . . . . .	2,366	1,236	1,130	1,067	63	45.10	2.66	52.24
Boxes (paper and wooden), . . . . .	215	98	117	108	9	50.23	4.19	45.58
Brick, tiles, and sewer pipe, . . . . .	114	75	39	35	4	30.70	3.51	65.79
Brooms, brushes, and mops, . . . . .	72	37	35	29	6	40.28	8.33	51.39
Building (including concrete walks, paving, etc.), . . . . .	3,793	2,566	1,227	1,190	37	31.37	0.98	67.65
Burial cases, caskets, coffins, etc., . . . . .	113	82	31	29	2	25.66	1.77	72.57
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	63	33	30	25	5	39.69	7.94	52.38
Carriages and wagons, . . . . .	1,013	517	496	485	11	47.89	1.08	51.04
Charcoal and kindlers (including fireworks and matches), . . . . .	16	12	4	4	—	25.00	—	75.00
Chemical preparations, compounded (including fertilizers), . . . . .	40	14	26	20	6	50.00	15.00	35.00
Clothing, . . . . .	2,402	1,576	826	792	34	32.97	1.42	65.61
Cooking, lighting, and heating apparatus, . . . . .	65	32	33	30	3	46.15	4.62	49.23
Cordage and twine, . . . . .	52	16	36	33	3	63.46	5.77	30.77
Cotton goods, . . . . .	165	28	137	87	50	52.73	30.30	16.97
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	926	770	156	121	35	13.07	3.78	83.15
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	38	14	24	22	2	57.90	5.26	36.84
Electrical apparatus and appliances, . . . . .	40	16	24	21	3	52.50	7.50	40.00

INDUSTRIES.	Whole Number of Establishments	Number of Establishments not Reporting as to Net Profits	Number of Establishments Reporting as to Net Profits	NUMBER OF ESTABLISHMENTS—		PERCENTAGES OF ESTABLISHMENTS—		
				making a profit	not making a profit	making a profit	not making a profit	not answering
Electroplating (including jewelry burnishing and lapidary work), . . . . .	42	11	81	28	3	66.67	7.14	26.19
Fancy articles (including fine arts and taxidermy), . . . . .	41	25	16	15	1	36.58	2.44	60.98
Flax, hemp, and jute goods (including linen), . . . . .	12	3	9	7	2	58.33	16.67	25.00
Food preparations (including salt), . . . . .	1,716	1,032	684	642	42	37.41	2.45	60.14
Furniture, . . . . .	603	299	304	269	35	44.61	5.80	49.59
Gas and residual products, . . . . .	66	31	35	32	3	48.48	4.55	46.97
Glass, . . . . .	20	8	12	12	—	60.00	—	40.00
Glue, isinglass, and starch, . . . . .	29	7	22	20	2	68.96	6.90	24.14
Hair work (animal and human), . . . . .	55	33	22	21	1	38.18	1.82	60.00
Hosiery and knit goods, . . . . .	60	28	32	30	2	50.00	3.33	46.67
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	27	15	12	12	—	44.44	—	55.56
Ivory, bone, shell, and horn goods, etc., . . . . .	89	14	25	24	1	61.54	2.56	35.90
Leather, . . . . .	609	332	367	340	27	48.64	3.86	47.50
Liquors and beverages (not spirituous), . . . . .	63	38	25	24	1	38.09	1.59	60.32
Liquors: malt, distilled, and fermented, . . . . .	218	126	92	86	6	39.45	2.75	57.60
Lumber, . . . . .	466	249	217	190	27	40.77	5.80	53.43
Machines and machinery, . . . . .	622	220	402	367	35	59.00	5.63	35.37
Metals and metallic goods (including clocks and watches), . . . . .	2,779	1,631	1,148	1,056	92	38.00	3.31	58.69
Models and patterns, . . . . .	51	14	37	36	1	70.59	1.96	27.45
Musical instruments and materials, . . . . .	93	28	65	63	2	67.74	2.15	30.11
Oils and illuminating fluids, . . . . .	28	18	10	7	3	25.00	10.71	64.29
Paints, colors, and crude chemicals (including dye-stuffs), . . . . .	31	13	18	16	2	51.61	6.45	41.94
Paper and paper goods, . . . . .	148	40	108	88	20	59.46	13.51	27.03
Photographs and photographic materials, . . . . .	241	126	115	109	6	45.23	2.49	52.28
Pollshes and dressing (including emery and sand paper and cloth, etc.), . . . . .	78	42	36	31	5	39.74	6.41	53.55
Printing, publishing, and bookbinding, . . . . .	712	313	399	376	23	52.81	3.23	43.96
Print works, dye works, and bleacheries, . . . . .	96	31	65	55	10	57.29	10.42	32.29
Railroad construction and equipment, . . . . .	15	5	10	6	4	40.00	26.67	33.33
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	44	19	25	22	3	50.00	6.82	43.18
Scientific instruments and appliances, . . . . .	65	33	32	30	2	46.15	3.08	50.77
Shipbuilding (including awnings, tents, and decorations), . . . . .	293	168	125	117	8	39.93	2.73	57.34

INDUSTRIES.	Whole Number of Establishments	Number of Establishments not Reporting as to Net Profits	Number of Establishments Reporting as to Net Profits	NUMBER OF ESTABLISHMENTS—		PERCENTAGES OF ESTABLISHMENTS—		
				making a profit	not making a profit	making a profit	not making a profit	not answering
Silk and silk goods (including buttons and dress trimmings), . . . . .	28	12	16	14	2	50.00	7.14	42.86
Sporting and athletic goods, . . . . .	27	14	13	12	1	44.45	3.70	51.55
Stone, . . . . .	378	185	193	184	9	48.68	2.38	49.94
Straw and palm leaf goods, . . . . .	47	28	19	16	3	34.04	6.38	59.58
Tallow, candles, soap, and grease, . . . . .	155	82	73	64	9	41.29	5.81	52.90
Tobacco, snuff, and cigars, . . . . .	302	178	124	111	13	36.76	4.30	58.94
Toys and games (children's), . . . . .	15	4	11	10	1	66.67	6.66	26.67
Trunks and valises, . . . . .	25	13	12	11	1	44.00	4.00	52.00
Whips, lashes, and stocks, . . . . .	60	34	26	25	1	41.67	1.66	56.67
Wooden goods (including corks, bungs, and taps), . . . . .	538	278	260	240	20	44.61	3.72	51.67
Woollen goods, . . . . .	189	48	141	116	25	61.37	13.23	25.40
Worsted goods, . . . . .	23	6	17	13	4	56.52	17.39	26.09
ALL INDUSTRIES, . . . . .	23,431	13,418	10,013	9,251	762	39.48	3.25	57.27

A consideration of this table is made in the analysis which follows the industry presentations. It is postponed until then for the reason that its results can there be brought into direct comparison with other points of information with which they are intimately related.

For the same reason, no consideration is made of the industry presentations, which commence on page 270, until the analysis is reached. In those cases where explanatory text is needed in order that the industry table may be understood it is given at the end of the industry presentation.

In order to show the percentage of net profits in manufacturing industries, seven tables are required for each industry. The object and composition of each table, the series being identical in form for each industry, may be explained as follows:

*Capital Invested.*—This table includes all the establishments in the industry. Its object is to show, first, as regards those establishments making a profit, the number and percentage of establishments making a profit, and the amount and percentage of capital invested paying a profit; second, concerning those establishments not making a profit, the num-

ber and percentage of establishments not making a profit, and the amount and percentage of capital invested not paying a profit; third, comprehending those establishments reporting as to net profits, whether making a profit or not, the number and percentage of establishments reporting as to net profits, and the amount and percentage of capital invested in the establishments reporting as to net profits; fourth, as regards those establishments "not answering," or not reporting as to net profits, the number and percentage of establishments not reporting as to net profits, and the amount and percentage of the total capital invested in the industry not represented in the presentation of net profits.

*Classified Capital.* — This table also includes all the establishments in the industry. Its purpose is to show the details of capital invested, both by amounts and percentages. In the first part of the table, the details of capital invested appear, comprising (1) Land, (2) Buildings and Fixtures, (3) Machinery, (4) Implements and Tools, (5) Cash Capital, (6) Credit Capital supplied by Partners or Stockholders, and (7) Credit Capital including Bills Payable, Accounts on long time, etc. The second part of the table is a "Classified Summary" in which the seven details are brought under the following heads: (1) Land, Buildings, and Fixtures, (2) Machinery, Implements, and Tools, (3) Cash Capital, and (4) Credit Capital. Amounts and percentages of the total capital invested in the industry are given for both forms of classification.

*Selling Price.* — This table also includes all the establishments in the industry, and is identical in form with the one relating to "Capital Invested," except that "Value of Goods Made and Work Done," or "Selling Price," takes the place of "Capital Invested." The number and percentage of establishments is the same, naturally, in both tables, while the figures for "Selling Price" show the value of goods made and work done by capital paying a profit, not paying a profit, or not reporting as regards net profits.

*Cost of Production.* — This table includes only those establishments that reported as to net profits. It shows the respective percentages of the cost of production required for (1) Stock Used, (2) Salaries, (3) Wages, (4) Rent, (5) Taxes,

(6) Insurance, (7) Freight, (8) New Equipment, (9) Repairs, and (10) Other Expenses. The percentages totalize to 100 per cent, representing the total cost of production.

*Relation of Cost of Production to Selling Price.* — This table includes only those establishments that reported as to net profits. Its form is similar to the table for "Cost of Production," but the percentages relate to "Selling Price," which becomes 100 per cent, and the various lines of the table show the respective percentages of the selling price represented by (1) Stock Used, (2) Salaries, (3) Wages, (4) Rent, (5) Taxes, (6) Insurance, (7) Freight, (8) New Equipment, (9) Repairs, (10) Other Expenses, and (11) Excess of Selling Price above Cost of Production. A foot-note to each industry presentation shows the per cent on amount of capital invested that is equivalent to the percentage of selling price represented by the excess of selling price above the cost of production.

*Distribution of Excess of Selling Price above Cost of Production.* — If the items included in the "Cost of Production" table covered every expense or outlay, direct or indirect, immediate or reaching into the future, then the excess of selling price above the cost of production would be the net profits. But there are other items of expense or outlay which are given in this table, which includes only those establishments that reported as to net profits. The percentages are percentages of "Selling Price," and totalize to the percentage of selling price that represented the excess of selling price above cost of production in the table headed "Relation of Cost of Production to Selling Price." The details of the table under consideration are (1) Five per cent on cash and credit capital for Interest, (2) Ten per cent on value of machinery, implements, and tools for Depreciation, (3) Five per cent on selling price for Allowance for Selling Expenses and Losses by Bad Debts, and (4) Net Profit. A foot-note to each industry presentation shows the per cent on amount of capital invested that is equivalent to the percentage of selling price represented by the net profit.

*Comparison of Earnings and Profits.* — In this table the number and average yearly earnings of employ  s are drawn from the returns for all the establishments in the industry, the

respective numbers of private firms and corporations being shown in foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from those establishments only which reported as to net profits. The average yearly earnings of employes is an average based upon the total sum paid in wages during the year to all employes, including with male and female adults the young persons and children also employed in the industry, without regard to the length of time employed of each sex or age class of employes. This average figure for earnings must be less than the actual yearly earnings of male adults, but it is the only figure obtainable that can be brought into direct comparison with the results showing the average net profit to each partner or stockholder, which latter averages are as general in their nature as those used for the employes; in other words, the partners with small capital and the partners with large capital are merged in a general total and represented by a general average, as are the large and small stockholders. In foot-notes to each industry presentation the average net profit of each partner or stockholder is shown to be equivalent to a specified per cent on the average investment.

No one should make use of these tables without careful consideration of the analyses for each industry which follow the tables. These analyses are intended to supplement the tabular presentations, as deductions drawn from the figures alone without due regard to the analyses would in many cases be misleading. This is particularly the case in considering net profits, where the *percentage rate* of net profits of capital invested should, in all cases, be compared with the net profit for each partner or stockholder as given in *amounts* in the table devoted to the comparison of earnings and profits.

The 10,013 returns from which these statistics have been tabulated were made out by the manufacturers themselves and were in every case accompanied by the following certificate made by the partner or corporation official who supplied the information: "*This is to certify that the Answers to the Inquiries in this Schedule are complete and correct to the best of my knowledge and belief.*"



## Agricultural Implements.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	15	\$1,608,114	50.00	74.01
Not making a profit, . . . . .	8	468,515	10.00	21.56
Totals, . . . . .	18	\$2,076,629	60.00	95.57
Not answering, . . . . .	12	96,337	40.00	4.43
AGGREGATES, . . . . .	30	\$2,172,966	100.00	100.00

## Classified Capital. [30 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$103,944	4.78
Buildings and fixtures, . . . . .	440,670	20.28
Machinery, . . . . .	179,152	8.25
Implements and tools, . . . . .	17,868	0.82
Cash capital, . . . . .	804,915	37.04
Supplied by partners or stockholders, . . . . .	57,407	2.64
Bills payable, accounts on long time, etc., . . . . .	569,010	26.19
TOTAL, . . . . .	\$2,172,966	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$544,614	25.06
Machinery, implements, and tools, . . . . .	197,020	9.07
Cash capital, . . . . .	804,915	37.04
Credit capital, . . . . .	626,417	28.83
AGGREGATE, . . . . .	\$2,172,966	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	15	\$1,039,212	50.00	78.46
Not making a profit, . . . . .	8	135,526	10.00	10.23
Totals, . . . . .	18	\$1,174,738	60.00	88.69
Not answering, . . . . .	12	149,869	40.00	11.31
AGGREGATES, . . . . .	30	\$1,324,597	100.00	100.00

## Cost of Production. [18 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	62.11
Salaries, . . . . .	5.05
Wages, . . . . .	34.88
Rent, . . . . .	1.03
Taxes, . . . . .	1.12
Insurance, . . . . .	0.30
Freight, . . . . .	5.18
New equipment, . . . . .	-
Repairs, . . . . .	0.31
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Agricultural Implements — Concluded.***Relation of Cost of Production to Selling Price.* [18 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	39.26
Salaries, . . . . .	8.80
Wages, . . . . .	26.27
Rent, . . . . .	0.79
Taxes, . . . . .	0.86
Insurance, . . . . .	0.22
Freight, . . . . .	3.90
New equipment, . . . . .	-
Repairs, . . . . .	0.24
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*24.67
TOTAL, . . . . .	100.00

\* Equivalent to 13.95 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[18 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	5.82
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.61
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*12.24
TOTAL (percentage of selling price above cost of production), . . . . .	24.67

\* Equivalent to 6.92 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 30 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 18 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 121 employes (both sexes and all ages), . . . . .	*\$437.50
Number of partners, . . . . .	19
Average investment by each partner, . . . . .	\$6,950
Average net profit to each partner, . . . . .	†\$481
<i>Corporations.</i>	
Average yearly earnings of 738 employes (both sexes and all ages), . . . . .	†\$400.70
Number of stockholders, . . . . .	62
Average investment by each stockholder, . . . . .	\$31,364
Average net profit to each stockholder, . . . . .	†\$2,172

\* For 24 private firms.

† For 6 corporations.

‡ Equivalent to 6.92 per cent on average investment.

## Arms and Ammunition.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	19	\$1,991,383	47.50	44.34
Not making a profit, . . . . .	8	265,432	7.50	5.91
Totals, . . . . .	22	\$2,256,815	55.00	50.25
Not answering, . . . . .	18	2,234,279	45.00	49.75
AGGREGATES, . . . . .	40	\$4,491,094	100.00	100.00

## Classified Capital. [40 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$803,909	17.99
Buildings and fixtures, . . . . .	1,099,613	24.43
Machinery, . . . . .	1,127,295	25.10
Implements and tools, . . . . .	450,541	10.03
Cash capital, . . . . .	583,685	13.00
Supplied by partners or stockholders, . . . . .	203,721	4.54
Bills payable, accounts on long time, etc., . . . . .	222,350	4.95
TOTAL, . . . . .	\$4,491,094	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,903,522	42.36
Machinery, implements, and tools, . . . . .	1,577,836	35.13
Cash capital, . . . . .	583,685	13.00
Credit capital, . . . . .	426,071	9.49
AGGREGATE, . . . . .	\$4,491,094	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	19	\$1,295,590	47.50	62.93
Not making a profit, . . . . .	8	113,269	7.50	5.50
Totals, . . . . .	22	\$1,408,859	55.00	68.43
Not answering, . . . . .	18	650,020	45.00	31.57
AGGREGATES, . . . . .	40	\$2,058,879	100.00	100.00

## Cost of Production. [22 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	37.81
Salaries, . . . . .	3.94
Wages, . . . . .	53.34
Rent, . . . . .	0.73
Taxes, . . . . .	1.35
Insurance, . . . . .	0.63
Freight, . . . . .	0.92
New equipment, . . . . .	0.14
Repairs, . . . . .	1.14
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Arms and Ammunition — Concluded.***Relation of Cost of Production to Selling Price.* [22 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	31.07
Salaries, . . . . .	3.24
Wages, . . . . .	43.84
Rent, . . . . .	0.60
Taxes, . . . . .	1.11
Insurance, . . . . .	0.52
Freight, . . . . .	0.76
New equipment, . . . . .	0.11
Repairs, . . . . .	0.94
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*17.81
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 11.12 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[22 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.80
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	6.63
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*5.38</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>17.81</b>

\* Equivalent to 3.36 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 40 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 22 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,562 employes (both sexes and all ages), . . . . .	*\$561.45
Number of partners, . . . . .	24
Average investment by each partner, . . . . .	\$58,084
Average net profit to each partner, . . . . .	†\$1,952
<i>Corporations.</i>	
Average yearly earnings of 209 employes (both sexes and all ages), . . . . .	†\$500.22
Number of stockholders, . . . . .	145
Average investment by each stockholder, . . . . .	\$5,950
Average net profit to each stockholder, . . . . .	†\$200

\* For 36 private firms.

† For 4 corporations.

‡ Equivalent to 3.36 per cent on average investment.

**Artificial Teeth and Dental Work.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	103	\$86,440	21.06	26.56
Not making a profit, . . . . .	17	9,548	3.48	3.82
Totals, . . . . .	120	\$75,988	24.54	30.38
Not answering, . . . . .	369	174,110	75.46	69.62
AGGREGATES, . . . . .	489	\$250,098	100.00	100.00

*Classified Capital.* [489 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$550	0.22
Buildings and fixtures, . . . . .	18,835	7.53
Machinery, . . . . .	19,991	7.99
Implements and tools, . . . . .	154,398	61.74
Cash capital, . . . . .	55,624	22.24
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	700	0.28
TOTAL, . . . . .	\$250,098	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$19,385	7.75
Machinery, implements, and tools, . . . . .	174,389	69.73
Cash capital, . . . . .	55,624	22.24
Credit capital, . . . . .	700	0.28
AGGREGATE, . . . . .	\$250,098	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	103	\$160,708	21.06	24.66
Not making a profit, . . . . .	17	11,884	3.48	1.82
Totals, . . . . .	120	\$172,587	24.54	26.48
Not answering, . . . . .	369	479,270	75.46	73.52
AGGREGATES, . . . . .	489	\$651,857	100.00	100.00

*Cost of Production.* [120 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	61.14
Salaries, . . . . .	-
Wages, . . . . .	10.86
Rent, . . . . .	84.49
Taxes, . . . . .	1.91
Insurance, . . . . .	0.42
Freight, . . . . .	0.26
New equipment, . . . . .	-
Repairs, . . . . .	0.92
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Artificial Teeth and Dental Work — Concluded.***Relation of Cost of Production to Selling Price.* [120 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	24.72
Salaries, . . . . .	—
Wages, . . . . .	5.25
Rent, . . . . .	16.67
Taxes, . . . . .	0.92
Insurance, . . . . .	0.20
Freight, . . . . .	0.13
New equipment, . . . . .	—
Repairs, . . . . .	0.44
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*51.67
TOTAL, . . . . .	100.00

\* Equivalent to 117.36 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[120 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.50
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	3.07
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*43.10
TOTAL (percentage of selling price above cost of production), . . . . .	51.67

\* Equivalent to 97.90 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 489 establishments, the number of private firms being shown in the foot-note. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 120 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 59 employes (both sexes and all ages), . . . . .	*\$554.58
Number of partners, . . . . .	128
Average investment by each partner, . . . . .	‡\$584
Average net profit to each partner, . . . . .	†\$581

\* For 489 private firms.

† Equivalent to 97.90 per cent on average investment.

**Artisans' Tools.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	69	\$3,104,730	49.29	84.23
Not making a profit, . . . . .	8	293,289	5.71	7.96
Totals, . . . . .	77	\$3,398,019	55.00	92.19
Not answering, . . . . .	63	287,952	45.00	7.81
AGGREGATES, . . . . .	140	\$3,685,971	100.00	100.00

*Classified Capital.* [140 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$353,015	9.58
Buildings and fixtures, . . . . .	595,748	16.16
Machinery, . . . . .	821,133	22.28
Implements and tools, . . . . .	304,006	8.25
Cash capital, . . . . .	1,334,620	36.21
Supplied by partners or stockholders, . . . . .	59,773	1.62
Bills payable, accounts on long time, etc., . . . . .	217,676	5.90
TOTAL, . . . . .	\$3,685,971	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$948,763	25.74
Machinery, implements, and tools, . . . . .	1,125,139	30.53
Cash capital, . . . . .	1,334,620	36.21
Credit capital, . . . . .	277,449	7.52
AGGREGATE, . . . . .	\$3,685,971	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	69	\$1,919,593	49.29	76.51
Not making a profit, . . . . .	8	107,494	5.71	4.28
Totals, . . . . .	77	\$2,027,087	55.00	80.79
Not answering, . . . . .	63	482,020	45.00	19.21
AGGREGATES, . . . . .	140	\$2,509,107	100.00	100.00

*Cost of Production.* [77 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	38.18
Salaries, . . . . .	6.98
Wages, . . . . .	47.60
Rent, . . . . .	0.83
Taxes, . . . . .	1.15
Insurance, . . . . .	0.25
Freight, . . . . .	2.68
New equipment, . . . . .	0.35
Repairs, . . . . .	1.93
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Artisans' Tools — Concluded.***Relation of Cost of Production to Selling Price.* [77 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	29.04
Salaries, . . . . .	5.81
Wages, . . . . .	36.21
Rent, . . . . .	0.67
Taxes, . . . . .	0.88
Insurance, . . . . .	0.19
Freight, . . . . .	2.04
New equipment, . . . . .	0.26
Repairs, . . . . .	1.47
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*23.93
TOTAL, . . . . .	100.00

\* Equivalent to 14.27 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[77 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.67
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	5.12
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*10.14
TOTAL (percentage of selling price above cost of production), . . . . .	23.93

\* Equivalent to 6.05 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 140 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 77 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,072 employes (both sexes and all ages), . . . . .	*\$414.66
Number of partners, . . . . .	100
Average investment by each partner, . . . . .	\$11,639
Average net profit to each partner, . . . . .	†\$704
<i>Corporations.</i>	
Average yearly earnings of 930 employes (both sexes and all ages), . . . . .	†\$484.14
Number of stockholders, . . . . .	611
Average investment by each stockholder, . . . . .	\$3,657
Average net profit to each stockholder, . . . . .	†\$221

\* For 129 private firms.

† For 11 corporations.

‡ Equivalent to 6.05 per cent on average investment.



## Boots and Shoes.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	1,067	\$24,910,788	45.10	72.50
Not making a profit, . . . . .	63	1,650,368	2.66	4.81
Totals, . . . . .	1,130	\$26,561,156	47.76	77.41
Not answering, . . . . .	1,236	7,752,265	52.24	22.59
AGGREGATES, . . . . .	2,366	\$34,313,421	100.00	100.00

*Classified Capital.* [2,366 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$896,310	2.61
Buildings and fixtures, . . . . .	3,256,603	9.49
Machinery, . . . . .	4,513,370	13.16
Implements and tools, . . . . .	698,281	2.03
Cash capital, . . . . .	20,354,644	59.32
Supplied by partners or stockholders, . . . . .	1,216,355	3.54
Bills payable, accounts on long time, etc., . . . . .	3,390,858	9.85
TOTAL, . . . . .	\$34,313,421	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$4,152,913	12.10
Machinery, implements, and tools, . . . . .	5,209,651	15.19
Cash capital, . . . . .	20,354,644	59.32
Credit capital, . . . . .	4,696,213	12.39
AGGREGATE, . . . . .	\$34,313,421	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	1,067	\$81,509,537	45.10	71.04
Not making a profit, . . . . .	63	4,389,796	2.66	3.53
Totals, . . . . .	1,130	\$85,899,333	47.76	74.57
Not answering, . . . . .	1,236	28,830,200	52.24	25.13
AGGREGATES, . . . . .	2,366	\$114,729,533	100.00	100.00

*Cost of Production.* [1,130 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	69.39
Salaries, . . . . .	1.23
Wages, . . . . .	27.65
Rent, . . . . .	0.56
Taxes, . . . . .	0.16
Insurance, . . . . .	0.22
Freight, . . . . .	0.53
New equipment, . . . . .	0.68
Repairs, . . . . .	0.15
Other expenses, . . . . .	0.68
TOTAL, . . . . .	100.00

## Boots and Shoes — Concluded.

*Relation of Cost of Production to Selling Price.* [1,130 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	61.71
Salaries, . . . . .	1.10
Wages, . . . . .	24.62
Rent, . . . . .	0.50
Taxes, . . . . .	0.14
Insurance, . . . . .	0.19
Freight, . . . . .	0.52
New equipment, . . . . .	0.07
Repairs, . . . . .	0.14
Other expenses, . . . . .	0.07
Excess of Selling Price above Cost of Production, . . . . .	*10.94
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 86.39 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[1,130 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.12
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.47
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*4.86</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>10.94</b>

\* Equivalent to 14.06 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 2,366 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 1,130 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 66,800 employes (both sexes and all ages), . . . . .	*\$385.89
Number of partners, . . . . .	1,567
Average investment by each partner, . . . . .	\$15,974
Average net profit to each partner, . . . . .	†\$2,247
<i>Corporations.</i>	
Average yearly earnings of 2,731 employes (both sexes and all ages), . . . . .	†\$417.06
Number of stockholders, . . . . .	336
Average investment by each stockholder, . . . . .	\$4,554
Average net profit to each stockholder, . . . . .	‡\$640

\* For 2,344 private firms.

† For 22 corporations.

‡ Equivalent to 14.06 per cent on average investment.

## Boxes (Paper and Wooden).

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Establishments	Capital Invested
Making a profit, . . . . .	108	\$1,760,254	50.23	70.84
Not making a profit, . . . . .	9	61,965	4.19	2.49
Totals, . . . . .	117	\$1,822,219	54.42	73.33
Not answering, . . . . .	98	662,701	45.58	26.67
AGGREGATES, . . . . .	215	\$2,484,920	100.00	100.00

*Classified Capital.* [215 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$289,603	11.66
Buildings and fixtures, . . . . .	496,490	19.98
Machinery, . . . . .	443,154	17.83
Implements and tools, . . . . .	57,884	2.33
Cash capital, . . . . .	903,582	36.36
Supplied by partners or stockholders, . . . . .	38,800	1.48
Bills payable, accounts on long time, etc., . . . . .	267,407	10.36
TOTAL, . . . . .	\$2,484,920	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$786,093	31.64
Machinery, implements, and tools, . . . . .	501,088	20.16
Cash capital, . . . . .	903,582	36.36
Credit capital, . . . . .	294,207	11.84
AGGREGATE, . . . . .	\$2,484,920	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Establishments	Selling Price
Making a profit, . . . . .	108	\$2,771,534	50.23	63.97
Not making a profit, . . . . .	9	107,813	4.19	2.49
Totals, . . . . .	117	\$2,879,347	54.42	66.46
Not answering, . . . . .	98	1,453,158	45.58	33.54
AGGREGATES, . . . . .	215	\$4,332,505	100.00	100.00

*Cost of Production.* [117 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	60.50
Salaries, . . . . .	1.48
Wages, . . . . .	30.96
Rent, . . . . .	1.64
Taxes, . . . . .	0.51
Insurance, . . . . .	0.44
Freight, . . . . .	3.56
New equipment, . . . . .	0.08
Repairs, . . . . .	0.85
Other expenses, . . . . .	0.03
TOTAL, . . . . .	100.00

**Boxes (Paper and Wooden) — Concluded.***Relation of Cost of Production to Selling Price.* [117 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	50.86
Salaries, . . . . .	1.24
Wages, . . . . .	26.02
Rent, . . . . .	1.38
Taxes, . . . . .	0.43
Insurance, . . . . .	0.37
Freight, . . . . .	3.00
New equipment, . . . . .	0.08
Repairs, . . . . .	0.72
Other expenses, . . . . .	0.02
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*15.93
TOTAL, . . . . .	100.00

\* Equivalent to 25.18 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[117 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.52
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.28
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*8.13
TOTAL (percentage of selling price above cost of production), . . . . .	15.93

\* Equivalent to 12.85 per cent on amount of capital invested.

*Comparison of Earnings and Profits.* [117 Establishments.]

[In this table the number and average yearly earnings of employes are drawn from the returns of 215 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 117 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 8,347 employes (both sexes and all ages), . . . . .	*\$303.96
Number of partners, . . . . .	155
Average investment by each partner, . . . . .	\$9,575
Average net profit to each partner, . . . . .	†\$1,230
<i>Corporations.</i>	
Average yearly earnings of 244 employes (both sexes and all ages), . . . . .	†\$396.05
Number of stockholders, . . . . .	45
Average investment by each stockholder, . . . . .	\$7,514
Average net profit to each stockholder, . . . . .	†\$966

\* For 209 private firms.

† For 6 corporations.

‡ Equivalent to 12.85 per cent on average investment.

**Brick, Tiles, and Sewer Pipe.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	35	\$829,459	80.70	86.66
Not making a profit, . . . . .	4	70,587	3.51	3.12
Totals, . . . . .	39	\$900,046	34.21	39.78
Not answering, . . . . .	75	1,362,368	65.79	60.22
AGGREGATES, . . . . .	114	\$2,262,414	100.00	100.00

*Classified Capital.* [114 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$798,375	35.29
Buildings and fixtures, . . . . .	276,119	12.20
Machinery, . . . . .	156,572	6.92
Implements and tools, . . . . .	66,238	2.93
Cash capital, . . . . .	543,228	24.01
Supplied by partners or stockholders, . . . . .	138,000	6.10
Bills payable, accounts on long time, etc., . . . . .	283,882	12.56
TOTAL, . . . . .	\$2,262,414	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,074,494	47.49
Machinery, implements, and tools, . . . . .	222,810	9.85
Cash capital, . . . . .	543,228	24.01
Credit capital, . . . . .	421,882	18.65
AGGREGATE, . . . . .	\$2,262,414	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	35	\$496,544	30.70	32.21
Not making a profit, . . . . .	4	37,350	3.51	2.42
Totals, . . . . .	39	\$533,894	34.21	34.63
Not answering, . . . . .	75	1,007,965	65.79	65.37
AGGREGATES, . . . . .	114	\$1,641,879	100.00	100.00

*Cost of Production.* [39 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	35.56
Salaries, . . . . .	3.16
Wages, . . . . .	49.83
Rent, . . . . .	0.72
Taxes, . . . . .	1.80
Insurance, . . . . .	0.70
Freight, . . . . .	8.44
New equipment, . . . . .	0.87
Repairs, . . . . .	1.73
Other expenses, . . . . .	0.19
TOTAL, . . . . .	100.00

**Brick, Tiles, and Sewer Pipe — Concluded.***Relation of Cost of Production to Selling Price.* [39 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	28.48
Salaries, . . . . .	2.53
Wages, . . . . .	39.91
Rent, . . . . .	0.58
Taxes, . . . . .	1.44
Insurance, . . . . .	0.56
Freight, . . . . .	4.38
New equipment, . . . . .	0.70
Repairs, . . . . .	1.38
Other expenses, . . . . .	0.15
Excess of Selling Price above Cost of Production, . . . . .	*19.91
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 11.81 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[39 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.60
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.66
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*9.65</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>19.91</b>

\* Equivalent to 5.72 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 114 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 39 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 2,122 employes (both sexes and all ages), . . . . .	*\$269.00
Number of partners, . . . . .	48
Average investment by each partner, . . . . .	\$11,575
Average net profit to each partner, . . . . .	†\$663
<i>Corporations.</i>	
Average yearly earnings of 758 employes (both sexes and all ages), . . . . .	†\$128.21
Number of stockholders, . . . . .	57
Average investment by each stockholder, . . . . .	\$6,043
Average net profit to each stockholder, . . . . .	†\$346

\* For 110 private firms.

† For 4 corporations.

‡ Equivalent to 5.72 per cent on average investment.

## Brooms, Brushes, and Mops.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	29	\$436,218	40.28	64.78
Not making a profit, . . . . .	6	29,825	8.33	4.43
Totals, . . . . .	35	\$466,043	48.61	69.21
Not answering, . . . . .	37	207,306	51.39	30.79
AGGREGATES, . . . . .	72	\$673,349	100.00	100.00

*Classified Capital.* [72 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$58,500	8.69
Buildings and fixtures, . . . . .	116,128	17.25
Machinery, . . . . .	39,313	5.84
Implements and tools, . . . . .	11,401	1.69
Cash capital, . . . . .	260,982	52.12
Supplied by partners or stockholders, . . . . .	45,000	6.68
Bills payable, accounts on long time, etc., . . . . .	52,025	7.73
TOTAL, . . . . .	\$673,349	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$174,628	25.94
Machinery, implements, and tools, . . . . .	50,714	7.53
Cash capital, . . . . .	350,982	52.12
Credit capital, . . . . .	97,025	14.41
AGGREGATE, . . . . .	\$673,349	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	29	\$1,019,343	40.28	74.06
Not making a profit, . . . . .	6	34,668	8.33	2.54
Totals, . . . . .	35	\$1,054,011	48.61	77.20
Not answering, . . . . .	37	311,362	51.39	22.80
AGGREGATES, . . . . .	72	\$1,365,373	100.00	100.00

*Cost of Production.* [35 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	66.05
Salaries, . . . . .	3.17
Wages, . . . . .	28.03
Rent, . . . . .	1.05
Taxes, . . . . .	0.49
Insurance, . . . . .	0.48
Freight, . . . . .	0.70
New equipment, . . . . .	-
Repairs, . . . . .	0.03
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Brooms, Brushes, and Mops — Concluded.***Relation of Cost of Production to Selling Price.* [35 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	55.08
Salaries, . . . . .	2.64
Wages, . . . . .	23.38
Rent, . . . . .	0.88
Taxes, . . . . .	0.41
Insurance, . . . . .	0.40
Freight, . . . . .	0.58
New equipment, . . . . .	—
Repairs, . . . . .	0.02
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*16.61
TOTAL, . . . . .	100.00

\* Equivalent to 37.57 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[35 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.47
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.33
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*9.81
TOTAL (percentage of selling price above cost of production), . . . . .	16.61

\* Equivalent to 22.18 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 72 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 35 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 888 employes (both sexes and all ages), . . . . .	*\$316.77
Number of partners, . . . . .	52
Average investment by each partner, . . . . .	\$8,947
Average net profit to each partner, . . . . .	†\$1,985
<i>Corporations.</i>	
Average yearly earnings of 89 employes (both sexes and all ages), . . . . .	†\$313.07
Number of stockholders (An association. See Analysis.), . . . . .	1
Average investment by each stockholder, . . . . .	\$800
Average net profit to each stockholder, . . . . .	†\$176

\* For 68 private firms.

† For 4 corporations.

‡ Equivalent to 22.18 per cent on average investment.



## Building (including Concrete Walks, Paving, etc.).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	1,190	\$4,508,101	31.37	39.72
Not making a profit, . . . . .	37	310,825	0.98	2.74
Totals, . . . . .	1,227	\$4,818,926	32.35	42.46
Not answering, . . . . .	2,563	6,531,308	67.65	57.54
AGGREGATES, . . . . .	3,793	\$11,350,234	100.00	100.00

## Classified Capital. [3,793 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,016,004	8.95
Buildings and fixtures, . . . . .	1,769,281	15.59
Machinery, . . . . .	587,485	5.17
Implements and tools, . . . . .	1,034,938	9.12
Cash capital, . . . . .	5,173,457	45.58
Supplied by partners or stockholders, . . . . .	452,750	3.99
Bills payable, accounts on long time, etc., . . . . .	1,316,319	11.60
TOTAL, . . . . .	\$11,350,234	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$2,785,285	24.54
Machinery, implements, and tools, . . . . .	1,622,423	14.29
Cash capital, . . . . .	5,173,457	45.58
Credit capital, . . . . .	1,769,069	15.59
AGGREGATE, . . . . .	\$11,350,234	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	1,190	\$15,759,557	31.37	39.45
Not making a profit, . . . . .	37	543,688	0.98	1.36
Totals, . . . . .	1,227	\$16,303,245	32.35	40.81
Not answering, . . . . .	2,566	23,648,798	67.65	59.19
AGGREGATES, . . . . .	3,793	\$39,952,043	100.00	100.00

## Cost of Production. [1,227 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	56.22
Salaries, . . . . .	0.42
Wages, . . . . .	40.32
Rent, . . . . .	1.48
Taxes, . . . . .	0.23
Insurance, . . . . .	0.18
Freight, . . . . .	0.84
New equipment, . . . . .	0.01
Repairs, . . . . .	0.16
Other expenses, . . . . .	0.14
TOTAL, . . . . .	100.00

**Building (including Concrete Walks, Paving, etc.) — Concluded.***Relation of Cost of Production to Selling Price.* [1,227 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	45.98
Salaries, . . . . .	0.34
Wages, . . . . .	32.94
Rent, . . . . .	1.20
Taxes, . . . . .	0.18
Insurance, . . . . .	0.15
Freight, . . . . .	0.09
New equipment, . . . . .	0.01
Repairs, . . . . .	0.13
Other expenses, . . . . .	0.12
Excess of Selling Price above Cost of Production, . . . . .	*18.31
TOTAL, . . . . .	100.00

\* Equivalent to 61.94 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[1,227 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.91
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.42
Allowance for selling expenses and losses by bad debts (3 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*11.98
TOTAL (percentage of selling price above cost of production), . . . . .	18.31

\* Equivalent to 40.54 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 3,793 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 1,227 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 34,106 employes (both sexes and all ages), . . . . .	*\$364.92
Number of partners, . . . . .	1,490
Average investment by each partner, . . . . .	\$3,099
Average net profit to each partner, . . . . .	†\$1,256
<i>Corporations.</i>	
Average yearly earnings of 830 employes (both sexes and all ages), . . . . .	†\$420.62
Number of stockholders, . . . . .	87
Average investment by each stockholder, . . . . .	\$2,323
Average net profit to each stockholder, . . . . .	†\$941

\* For 3,784 private firms.

† For 9 corporations.

‡ Equivalent to 40.54 per cent on average investment.

## Burial Cases, Caskets, Coffins, etc.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	29	\$256,515	25.66	50.91
Not making a profit, . . . . .	2	16,500	1.77	3.35
Totals, . . . . .	31	\$273,015	27.43	63.76
Not answering, . . . . .	82	155,168	72.57	36.34
AGGREGATES, . . . . .	113	\$428,178	100.00	100.00

*Classified Capital.* [113 Establishments.]

DETAILS OF CAPITAL INVESTED.		Amounts	Percentages
Land, . . . . .		\$47,300	11.05
Buildings and fixtures, . . . . .		126,765	29.61
Machinery, . . . . .		33,300	7.54
Implements and tools, . . . . .		23,310	5.44
Cash capital, . . . . .		172,678	40.33
Supplied by partners or stockholders, . . . . .		-	-
Bills payable, accounts on long time, etc., . . . . .		25,825	6.03
TOTAL, . . . . .		\$428,178	100.00
<i>Classified Summary.</i>			
Land, buildings, and fixtures, . . . . .		\$174,065	40.66
Machinery, implements, and tools, . . . . .		55,610	12.98
Cash capital, . . . . .		172,678	40.33
Credit capital, . . . . .		25,825	6.03
AGGREGATE, . . . . .		\$428,178	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	29	\$465,586	25.66	60.44
Not making a profit, . . . . .	2	6,500	1.77	0.84
Totals, . . . . .	31	\$472,086	27.43	61.28
Not answering, . . . . .	82	298,247	72.57	38.72
AGGREGATES, . . . . .	113	\$770,333	100.00	100.00

*Cost of Production.* [31 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	61.45
Salaries, . . . . .	5.04
Wages, . . . . .	28.20
Rent, . . . . .	1.35
Taxes, . . . . .	0.64
Insurance, . . . . .	1.42
Freight, . . . . .	0.72
New equipment, . . . . .	-
Repairs, . . . . .	0.69
Other expenses, . . . . .	0.49
TOTAL, . . . . .	100.00

**Burial Cases, Caskets, Coffins, etc. — Concluded.***Relation of Cost of Production to Selling Price.* [31 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	52.91
Salaries, . . . . .	4.33
Wages, . . . . .	24.28
Rent, . . . . .	1.16
Taxes, . . . . .	0.55
Insurance, . . . . .	1.22
Freight, . . . . .	0.62
New equipment, . . . . .	-
Repairs, . . . . .	0.60
Other expenses, . . . . .	0.42
<b>Excess of Selling Price above Cost of Production,</b>	<b>*13.91</b>
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 24.04 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[31 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.34
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.75
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*6.82</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>13.91</b>

\* Equivalent to 11.78 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 113 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 31 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 337 employes (both sexes and all ages), . . . . .	*\$491.66
Number of partners, . . . . .	41
Average investment by each partner, . . . . .	\$5,935
Average net profit to each partner, . . . . .	†\$699
<i>Corporations.</i>	
Average yearly earnings of 30 employes (both sexes and all ages), . . . . .	†\$314.57
Number of stockholders, . . . . .	40
Average investment by each stockholder, . . . . .	\$743
Average net profit to each stockholder, . . . . .	†\$88

\* For 112 private firms.

† For 1 corporation.

‡ Equivalent to 11.78 per cent on average investment.

# **Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles).**

## *Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	25	\$8,433,019	39.68	68.23
Not making a profit, . . . . .	5	273,500	7.94	2.21
Totals, . . . . .	30	\$8,706,519	47.62	70.44
Not answering, . . . . .	33	3,052,928	52.38	29.56
AGGREGATES, . . . . .	63	\$12,359,447	100.00	100.00

## *Classified Capital. [63 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$815,605	6.60
Buildings and fixtures, . . . . .	2,066,447	16.72
Machinery, . . . . .	2,980,103	24.11
Implements and tools, . . . . .	63,688	0.52
Cash capital, . . . . .	3,408,814	27.58
Supplied by partners or stockholders, . . . . .	680,000	5.50
Bills payable, accounts on long time, etc., . . . . .	2,344,790	18.97
TOTAL, . . . . .	\$12,359,447	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$2,882,052	23.32
Machinery, implements, and tools, . . . . .	3,043,791	24.63
Cash capital, . . . . .	3,408,814	27.58
Credit capital, . . . . .	3,024,790	24.47
AGGREGATE, . . . . .	\$12,359,447	100.00

## *Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	25	\$7,076,032	39.68	60.00
Not making a profit, . . . . .	5	450,400	7.94	4.39
Totals, . . . . .	30	\$7,526,432	47.62	73.39
Not answering, . . . . .	33	2,728,353	52.38	26.61
AGGREGATES, . . . . .	63	\$10,254,785	100.00	100.00

## *Cost of Production. [30 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	70.75
Salaries, . . . . .	1.62
Wages, . . . . .	23.39
Rent, . . . . .	0.29
Taxes, . . . . .	0.80
Insurance, . . . . .	0.14
Freight, . . . . .	0.55
New equipment, . . . . .	1.64
Repairs, . . . . .	0.82
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles) — Concluded.**

*Relation of Cost of Production to Selling Price.* [30 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	62.87
Salaries, . . . . .	1.44
Wages, . . . . .	20.79
Rent, . . . . .	0.26
Taxes, . . . . .	0.71
Insurance, . . . . .	0.12
Freight, . . . . .	0.49
New equipment, . . . . .	1.46
Repairs, . . . . .	0.73
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*11.13
TOTAL, . . . . .	100.00

\* Equivalent to 9.62 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[30 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.01
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.85
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*0.27
TOTAL (percentage of selling price above cost of production), . . . . .	11.13

\* Equivalent to 0.24 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 63 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 30 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,064 employes (both sexes and all ages), . . . . .	*\$310.95
Number of partners, . . . . .	24
Average investment by each partner, . . . . .	\$39,560
Average net profit to each partner, . . . . .	†\$93
<i>Corporations.</i>	
Average yearly earnings of 6,277 employes (both sexes and all ages), . . . . .	†\$285.60
Number of stockholders, . . . . .	672
Average investment by each stockholder, . . . . .	\$13,561
Average net profit to each stockholder, . . . . .	†\$32

\* For 43 private firms.

† For 15 corporations.

‡ Equivalent to 0.24 per cent on average investment.

## Carriages and Wagons.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	485	\$3,303,282	47.88	68.75
Not making a profit, . . . . .	11	124,000	1.08	2.58
Totals, . . . . .	496	\$3,427,282	48.96	71.33
Not answering, . . . . .	517	1,377,282	51.04	28.67
AGGREGATES, . . . . .	1,013	\$4,804,564	100.00	100.00

*Classified Capital.* [1,013 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages.
Land, . . . . .	\$496,882	10.34
Buildings and fixtures, . . . . .	1,081,506	22.51
Machinery, . . . . .	249,937	5.20
Implements and tools, . . . . .	275,654	5.74
Cash capital, . . . . .	2,192,997	45.64
Supplied by partners or stockholders, . . . . .	149,800	3.12
Bills payable, accounts on long time, etc., . . . . .	357,378	7.45
TOTAL, . . . . .	\$4,804,564	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,578,478	32.85
Machinery, implements, and tools, . . . . .	525,511	10.94
Cash capital, . . . . .	2,192,997	45.64
Credit capital, . . . . .	507,478	10.57
AGGREGATE, . . . . .	\$4,804,564	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	485	\$4,907,799	47.88	67.43
Not making a profit, . . . . .	11	119,658	1.08	1.65
Totals, . . . . .	496	\$5,027,457	48.96	69.08
Not answering, . . . . .	517	2,250,476	51.04	30.92
AGGREGATES, . . . . .	1,013	\$7,277,933	100.00	100.00

*Cost of Production.* [496 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	52.09
Salaries, . . . . .	0.90
Wages, . . . . .	41.23
Rent, . . . . .	2.09
Taxes, . . . . .	0.53
Insurance, . . . . .	0.59
Freight, . . . . .	1.49
New equipment, . . . . .	0.02
Repairs, . . . . .	0.46
Other expenses, . . . . .	2.
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Carriages and Wagons — Concluded.***Relation of Cost of Production to Selling Price.* [496 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	41.50
Salaries, . . . . .	0.71
Wages, . . . . .	32.54
Rent, . . . . .	1.85
Taxes, . . . . .	0.42
Insurance, . . . . .	0.46
Freight, . . . . .	1.18
New equipment, . . . . .	0.01
Repairs, . . . . .	0.37
Other expenses, . . . . .	*
Excess of Selling Price above Cost of Production, . . . . .	†21.07
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Less than one one-hundredth of one per cent.

† Equivalent to 30.90 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[496 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.92
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.74
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*13.41</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>21.07</b>

\* Equivalent to 19.67 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 1,013 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 496 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 4,800 employes (both sexes and all ages), . . . . .	*\$452.13
Number of partners, . . . . .	591
Average investment by each partner, . . . . .	\$5,158
Average net profit to each partner, . . . . .	†\$1,014
<i>Corporations.</i>	
Average yearly earnings of 251 employes (both sexes and all ages), . . . . .	†\$428.94
Number of stockholders, . . . . .	97
Average investment by each stockholder, . . . . .	\$3,909
Average net profit to each stockholder, . . . . .	†\$769

\* For 1,009 private firms.

† For 4 corporations.

‡ Equivalent to 19.67 per cent on average investment.



## Charcoal and Kindlers (including Fireworks and Matches).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	4	\$19,350	25.00	26.94
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	4	\$19,350	25.00	26.94
Not answering, . . . . .	12	52,483	75.00	73.06
AGGREGATES, . . . . .	16	\$71,833	100.00	100.00

## Classified Capital. [16 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$6,800	9.47
Buildings and fixtures, . . . . .	10,100	14.06
Machinery, . . . . .	17,700	24.64
Implements and tools, . . . . .	6,183	8.61
Cash capital, . . . . .	31,050	43.22
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	-	-
TOTAL, . . . . .	\$71,833	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$16,900	23.53
Machinery, implements, and tools, . . . . .	23,883	33.25
Cash capital, . . . . .	31,050	43.22
Credit capital, . . . . .	-	-
AGGREGATE, . . . . .	\$71,833	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	4	\$68,912	25.00	67.11
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	4	\$68,912	25.00	67.11
Not answering, . . . . .	12	33,778	75.00	32.89
AGGREGATES, . . . . .	16	\$102,690	100.00	100.00

## Cost of Production. [4 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	47.68
Salaries, . . . . .	-
Wages, . . . . .	49.20
Rent, . . . . .	-
Taxes, . . . . .	0.27
Insurance, . . . . .	-
Freight, . . . . .	1.94
New equipment, . . . . .	-
Repairs, . . . . .	0.91
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Charcoal and Kindlers (including Fireworks and Matches)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [4 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	19.07
Salaries, . . . . .	—
Wages, . . . . .	19.68
Rent, . . . . .	—
Taxes, . . . . .	0.11
Insurance, . . . . .	—
Freight, . . . . .	0.78
New equipment, . . . . .	—
Repairs, . . . . .	0.36
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*60.00
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 213.67 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[4 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.61
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.93
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*53.46</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>60.00</b>

\* Equivalent to 190.38 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 16 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 4 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 103 employes (both sexes and all ages), . . . . .	*\$192.37
Number of partners, . . . . .	4
Average investment by each partner, . . . . .	\$2,738
Average net profit to each partner, . . . . .	†\$5,212
<i>Corporations.</i>	
Average yearly earnings of 22 employes (both sexes and all ages), . . . . .	†\$363.64
Number of stockholders, . . . . .	158
Average investment by each stockholder, . . . . .	\$53
Average net profit to each stockholder, . . . . .	†\$101

\* For 15 private firms.

† For 1 corporation.

‡ Equivalent to 190.38 per cent on average investment.

**Chemical Preparations, Compounded (including Fertilizers).***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	20	\$3,559,716	50.00	86.32
Not making a profit, . . . . .	6	76,920	15.00	1.87
Totals, . . . . .	26	\$3,636,636	65.00	88.19
Not answering, . . . . .	14	487,199	35.00	11.81
AGGREGATES, . . . . .	40	\$4,123,835	100.00	100.00

*Classified Capital.* [40 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$169,405	4.11
Buildings and fixtures, . . . . .	363,243	8.81
Machinery, . . . . .	396,779	9.60
Implements and tools, . . . . .	17,694	0.43
Cash capital, . . . . .	2,334,485	56.61
Supplied by partners or stockholders, . . . . .	298,849	7.24
Bills payable, accounts on long time, etc., . . . . .	644,380	13.20
TOTAL, . . . . .	\$4,123,835	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$532,648	12.92
Machinery, implements, and tools, . . . . .	413,473	10.03
Cash capital, . . . . .	2,334,485	56.61
Credit capital, . . . . .	843,229	20.44
AGGREGATE, . . . . .	\$4,123,835	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	20	\$3,435,880	50.00	87.12
Not making a profit, . . . . .	6	176,759	15.00	4.48
Totals, . . . . .	26	\$3,612,639	65.00	91.60
Not answering, . . . . .	14	331,482	35.00	8.40
AGGREGATES, . . . . .	40	\$3,944,121	100.00	100.00

*Cost of Production.* [26 Establishments]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	73.18
Salaries, . . . . .	1.54
Wages, . . . . .	10.81
Rent, . . . . .	0.14
Taxes, . . . . .	0.24
Insurance, . . . . .	0.33
Freight, . . . . .	10.93
New equipment, . . . . .	-
Repairs, . . . . .	2.80
Other expenses, . . . . .	0.03
TOTAL, . . . . .	100.00

**Chemical Preparations, Compounded (including Fertilizers)**  
— Concluded.

*Relation of Cost of Production to Selling Price. [26 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	61.88
Salaries, . . . . .	1.30
Wages, . . . . .	9.14
Rent, . . . . .	0.11
Taxes, . . . . .	0.20
Insurance, . . . . .	0.28
Freight, . . . . .	9.24
New equipment, . . . . .	—
Repairs, . . . . .	2.37
Other expenses, . . . . .	0.03
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*15.45
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 15.35 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[26 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.88
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.01
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*5.52</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>15.45</b>

\* Equivalent to 5.52 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 40 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 26 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 193 employes (both sexes and all ages), . . . . .	*\$362.69
Number of partners, . . . . .	32
Average investment by each partner, . . . . .	\$8,418
Average net profit to each partner, . . . . .	†\$466
<i>Corporations.</i>	
Average yearly earnings of 670 employes (both sexes and all ages), . . . . .	†\$475.54
Number of stockholders, . . . . .	161
Average investment by each stockholder, . . . . .	\$20,915
Average net profit to each stockholder, . . . . .	‡\$1,155

\* For 27 private firms.

† For 13 corporations.

‡ Equivalent to 5.52 per cent on average investment.

## Chemical Preparations, Compounded (including Fertilizers).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	20	\$3,559,716	50.00	86.32
Not making a profit, . . . . .	6	76,920	15.00	1.87
Totals, . . . . .	26	\$3,636,636	65.00	88.19
Not answering, . . . . .	14	487,199	35.00	11.81
AGGREGATES, . . . . .	40	\$4,123,835	100.00	100.00

## Classified Capital. [40 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$169,405	4.11
Buildings and fixtures, . . . . .	363,243	8.81
Machinery, . . . . .	395,779	9.60
Implements and tools, . . . . .	17,694	0.43
Cash capital, . . . . .	2,334,485	56.61
Supplied by partners or stockholders, . . . . .	298,849	7.24
Bills payable, accounts on long time, etc., . . . . .	644,380	15.59
TOTAL, . . . . .	\$4,123,835	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$532,648	12.92
Machinery, implements, and tools, . . . . .	413,473	10.03
Cash capital, . . . . .	2,334,485	56.61
Credit capital, . . . . .	843,229	20.44
AGGREGATE, . . . . .	\$4,123,835	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	20	\$3,435,880	50.00	87.12
Not making a profit, . . . . .	6	176,769	15.00	4.45
Totals, . . . . .	26	\$3,612,639	65.00	91.60
Not answering, . . . . .	14	331,482	35.00	8.40
AGGREGATES, . . . . .	40	\$3,944,121	100.00	100.00

## Cost of Production. [26 Establishments]

CLASSIFICATION.	Percentage of Cost of Production
Stock used, . . . . .	73.15
Salaries, . . . . .	1.54
Wages, . . . . .	16.81
Rent, . . . . .	0.14
Taxes, . . . . .	0.24
Insurance, . . . . .	0.33
Freight, . . . . .	10.93
New equipment, . . . . .	-
Repairs, . . . . .	2.80
Other expenses, . . . . .	0.03
TOTAL, . . . . .	100.00

**Chemical Preparations, Compounded (including Fertilizers)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [26 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	61.88
Salaries, . . . . .	1.80
Wages, . . . . .	9.14
Rent, . . . . .	0.11
Taxes, . . . . .	0.20
Insurance, . . . . .	0.28
Freight, . . . . .	9.24
New equipment, . . . . .	-
Repairs, . . . . .	2.37
Other expenses, . . . . .	0.03
Excess of Selling Price above Cost of Production, . . . . .	*15.45
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 15.35 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[26 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.88
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.01
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*5.56</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>15.45</b>

\* Equivalent to 5.52 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 40 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 26 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 193 employes (both sexes and all ages), . . . . .	*\$362.69
Number of partners, . . . . .	32
Average investment by each partner, . . . . .	\$8,418
Average net profit to each partner, . . . . .	†\$465
<i>Corporations.</i>	
Average yearly earnings of 670 employes (both sexes and all ages), . . . . .	†\$475.54
Number of stockholders, . . . . .	161
Average investment by each stockholder, . . . . .	\$20,916
Average net profit to each stockholder, . . . . .	†\$1,155

\* For 27 private firms.

† For 13 corporations.

‡ Equivalent to 5.52 per cent on average investment.

## Clothing.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Cap- Invest.
Making a profit, . . . . .	792	\$5,783,930	32.97	46.4
Not making a profit, . . . . .	34	806,263	1.42	6.52
Totals, . . . . .	826	\$6,592,193	34.39	53.12
Not answering, . . . . .	1,576	5,907,625	65.61	46.54
AGGREGATES, . . . . .	2,402	\$12,399,808	100.00	100.00

## Classified Capital. [2,402 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$138,325	1.12
Buildings and fixtures, . . . . .	541,174	4.36
Machinery, . . . . .	717,203	5.77
Implements and tools, . . . . .	144,495	1.17
Cash capital, . . . . .	8,565,200	69.06
Supplied by partners or stockholders, . . . . .	401,498	3.26
Bills payable, accounts on long time, etc., . . . . .	1,801,908	14.53
TOTAL, . . . . .	\$12,399,808	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$679,500	5.49
Machinery, implements, and tools, . . . . .	861,698	6.96
Cash capital, . . . . .	8,565,200	69.06
Credit capital, . . . . .	2,293,401	18.49
AGGREGATE, . . . . .	\$12,399,808	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Sell- Pr.
Making a profit, . . . . .	792	\$14,636,743	32.97	44.71
Not making a profit, . . . . .	34	990,504	1.42	2.94
Totals, . . . . .	826	\$15,497,247	34.39	47.65
Not answering, . . . . .	1,576	17,162,590	65.61	52.35
AGGREGATES, . . . . .	2,402	\$32,659,837	100.00	100.00

## Cost of Production. [826 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	69.32
Salaries, . . . . .	2.60
Wages, . . . . .	24.21
Rent, . . . . .	3.35
Taxes, . . . . .	0.20
Insurance, . . . . .	0.20
Freight, . . . . .	0.22
New equipment, . . . . .	0.01
Repairs, . . . . .	0.14
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

## Clothing — Concluded.

*Relation of Cost of Production to Selling Price.* [826 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	54.77
Salaries, . . . . .	1.62
Wages, . . . . .	19.07
Rent, . . . . .	2.04
Taxes, . . . . .	0.16
Insurance, . . . . .	0.16
Freight, . . . . .	0.25
New equipment, . . . . .	0.01
Repairs, . . . . .	0.11
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*21.21
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 49.87 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[826 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.86
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.30
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*14.05</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>21.21</b>

\* Equivalent to 33.05 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 2,402 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 826 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 18,929 employes (both sexes and all ages), . . . . .	*\$296.90
Number of partners, . . . . .	1,013
Average investment by each partner, . . . . .	\$5,680
Average net profit to each partner, . . . . .	†\$1,877
<i>Corporations.</i>	
Average yearly earnings of 2,016 employes (both sexes and all ages), . . . . .	†\$238.96
Number of stockholders, . . . . .	1,187
Average investment by each stockholder, . . . . .	\$4,485
Average net profit to each stockholder, . . . . .	†\$1,482

\* For 2,387 private firms.

† For 15 corporations.

‡ Equivalent to 33.05 per cent on average investment.



## Cooking, Lighting, and Heating Apparatus.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	30	\$1,479,370	46.15	48.52
Not making a profit, . . . . .	3	42,600	4.62	1.35
Totals, . . . . .	33	\$1,521,970	50.77	49.80
Not answering, . . . . .	32	1,527,192	49.23	50.19
AGGREGATES, . . . . .	65	\$3,048,562	100.00	100.00

*Classified Capital.* [65 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$163,649	5.37
Buildings and fixtures, . . . . .	490,426	16.09
Machinery, . . . . .	186,628	6.12
Implements and tools, . . . . .	204,421	6.71
Cash capital, . . . . .	1,274,113	41.79
Supplied by partners or stockholders, . . . . .	354,569	11.63
Bills payable, accounts on long time, etc., . . . . .	374,756	12.29
TOTAL, . . . . .	\$3,048,562	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$654,075	21.44
Machinery, implements, and tools, . . . . .	391,049	12.83
Cash capital, . . . . .	1,274,113	41.79
Credit capital, . . . . .	729,325	23.92
AGGREGATE, . . . . .	\$3,048,562	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	30	\$1,857,769	46.15	59.32
Not making a profit, . . . . .	3	55,350	4.62	1.77
Totals, . . . . .	33	\$1,913,119	50.77	61.09
Not answering, . . . . .	32	1,218,463	49.23	38.91
AGGREGATES, . . . . .	65	\$3,131,582	100.00	100.00

*Cost of Production.* [33 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	41.03
Salaries, . . . . .	3.85
Wages, . . . . .	48.94
Rent, . . . . .	1.92
Taxes, . . . . .	0.56
Insurance, . . . . .	0.45
Freight, . . . . .	2.72
New equipment, . . . . .	0.02
Repairs, . . . . .	0.51
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Cooking, Lighting, and Heating Apparatus—Concluded.***Relation of Cost of Production to Selling Price.* [33 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	30.89
Salaries, . . . . .	2.90
Wages, . . . . .	36.84
Rent, . . . . .	1.44
Taxes, . . . . .	0.42
Insurance, . . . . .	0.34
Freight, . . . . .	2.04
New equipment, . . . . .	0.02
Repairs, . . . . .	0.38
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*24.73
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 31.09 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[33 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.61
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.02
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*16.10</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>24.73</b>

\* Equivalent to 20.24 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 65 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 33 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 775 employes (both sexes and all ages), . . . . .	*\$544.57
Number of partners, . . . . .	39
Average investment by each partner, . . . . .	\$13,542
Average net profit to each partner, . . . . .	†\$2,741
<i>Corporations.</i>	
Average yearly earnings of 1,644 employes (both sexes and all ages), . . . . .	†\$479.56
Number of stockholders, . . . . .	222
Average investment by each stockholder, . . . . .	\$4,474
Average net profit to each stockholder, . . . . .	†\$905

\* For 43 private firms.

† For 20 corporations.

‡ Equivalent to 20.24 per cent on average investment.

## Cordage and Twine.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	33	\$3,753,272	63.46	88.31
Not making a profit, . . . . .	3	15,300	5.77	0.36
Totals, . . . . .	36	\$3,768,572	69.23	88.67
Not answering, . . . . .	16	481,712	30.77	11.33
AGGREGATES, . . . . .	52	\$4,250,284	100.00	100.00

*Classified Capital. [52 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$420,430	9.90
Buildings and fixtures, . . . . .	519,896	12.23
Machinery, . . . . .	982,347	23.11
Implements and tools, . . . . .	26,532	0.63
Cash capital, . . . . .	1,600,573	37.86
Supplied by partners or stockholders, . . . . .	70,873	1.67
Bills payable, accounts on long time, etc., . . . . .	629,633	14.81
TOTAL, . . . . .	\$4,250,284	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$940,326	22.12
Machinery, implements, and tools, . . . . .	1,008,679	23.74
Cash capital, . . . . .	1,600,573	37.66
Credit capital, . . . . .	700,506	16.48
AGGREGATE, . . . . .	\$4,250,284	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	33	\$4,491,444	63.46	88.16
Not making a profit, . . . . .	3	13,733	5.77	0.27
Totals, . . . . .	36	\$4,505,177	69.23	88.73
Not answering, . . . . .	16	572,084	30.77	11.27
AGGREGATES, . . . . .	52	\$5,077,261	100.00	100.00

*Cost of Production. [36 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	77.34
Salaries, . . . . .	2.54
Wages, . . . . .	14.63
Rent, . . . . .	0.38
Taxes, . . . . .	0.77
Insurance, . . . . .	1.05
Freight, . . . . .	1.28
New equipment, . . . . .	0.34
Repairs, . . . . .	1.77
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

## Cordage and Twine — Concluded.

*Relation of Cost of Production to Selling Price.* [36 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	69.46
Salaries, . . . . .	2.29
Wages, . . . . .	13.14
Rent, . . . . .	0.34
Taxes, . . . . .	0.70
Insurance, . . . . .	0.94
Freight, . . . . .	1.16
New equipment, . . . . .	0.21
Repairs, . . . . .	1.59
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*10.18
TOTAL, . . . . .	100.00

\* Equivalent to 12.17 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[36 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.32
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.99
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*0.87
TOTAL (percentage of selling price above cost of production), . . . . .	10.18

\* Equivalent to 1.04 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 52 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 36 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 640 employes (both sexes and all ages), . . . . .	*\$245.60
Number of partners, . . . . .	46
Average investment by each partner, . . . . .	\$14,858
Average net profit to each partner, . . . . .	†\$155
<i>Corporations.</i>	
Average yearly earnings of 2,106 employes (both sexes and all ages), . . . . .	†\$265.06
Number of stockholders, . . . . .	256
Average investment by each stockholder, . . . . .	\$12,051
Average net profit to each stockholder, . . . . .	†\$128

\* For 38 private firms.

† For 14 corporations.

‡ Equivalent to 1.04 per cent on average investment.

## Cotton Goods.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Capital Invested
Making a profit, . . . . .	87	\$65,022,512	52.73	54.66
Not making a profit, . . . . .	50	36,822,437	30.30	30.06
Totals, . . . . .	137	\$101,844,949	83.03	85.02
Not answering, . . . . .	28	17,102,091	16.97	14.38
AGGREGATES, . . . . .	165	\$118,947,040	100.00	100.00

## Classified Capital. [165 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$6,448,028	5.42
Buildings and fixtures, . . . . .	23,087,094	19.41
Machinery, . . . . .	37,849,394	31.82
Implements and tools, . . . . .	739,576	0.62
Cash capital, . . . . .	23,637,439	19.87
Supplied by partners or stockholders, . . . . .	1,318,152	1.11
Bills payable, accounts on long time, etc., . . . . .	25,867,357	21.75
TOTAL, . . . . .	\$118,947,040	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$29,535,122	24.83
Machinery, implements, and tools, . . . . .	38,588,970	32.44
Cash capital, . . . . .	23,637,439	19.87
Credit capital, . . . . .	27,185,509	22.86
AGGREGATE, . . . . .	\$118,947,040	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Selling Price
Making a profit, . . . . .	87	\$36,468,316	52.73	59.35
Not making a profit, . . . . .	50	17,455,004	30.30	28.42
Totals, . . . . .	137	\$53,913,320	83.03	87.77
Not answering, . . . . .	28	7,511,177	16.97	12.23
AGGREGATES, . . . . .	165	\$61,425,097	100.00	100.00

## Cost of Production. [137 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	62.03
Salaries, . . . . .	1.53
Wages, . . . . .	24.84
Rent, . . . . .	0.07
Taxes, . . . . .	1.78
Insurance, . . . . .	0.35
Freight, . . . . .	2.44
New equipment, . . . . .	0.90
Repairs, . . . . .	1.92
Other expenses, . . . . .	0.14
TOTAL, . . . . .	100.00

## Cotton Goods — Concluded.

*Relation of Cost of Production to Selling Price.* [137 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	59.39
Salaries, . . . . .	1.46
Wages, . . . . .	27.61
Rent, . . . . .	0.07
Taxes, . . . . .	1.70
Insurance, . . . . .	0.34
Freight, . . . . .	2.33
New equipment, . . . . .	0.86
Repairs, . . . . .	1.84
Other expenses, . . . . .	0.14
Excess of Selling Price above Cost of Production, . . . . .	*4.26
TOTAL, . . . . .	100.00

\* Equivalent to 2.25 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[137 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	4.04
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	6.13
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net loss, . . . . .	*—10.91
TOTAL (percentage of selling price above cost of production), . . . . .	4.26

\* Equivalent to a loss of 5.77 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 165 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net loss to each partner or stockholder, are drawn from the 137 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 3,496 employes (both sexes and all ages), . . . . .	*\$268.53
Number of partners, . . . . .	72
Average investment by each partner, . . . . .	\$50,013
Average net loss to each partner, . . . . .	†\$2,891
<i>Corporations.</i>	
Average yearly earnings of 59,615 employes (both sexes and all ages), . . . . .	†\$268.00
Number of stockholders, . . . . .	12,043
Average investment by each stockholder, . . . . .	\$8,158
Average net loss to each stockholder, . . . . .	†\$471

\* For 54 private firms.

† For 111 corporations.

† Equivalent to a loss of 5.77 per cent on average investment.

NOTE. — In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *one per cent* for interest, *two per cent* for depreciation, and *one per cent* for selling expenses, etc., it will leave 1.23 per cent net profit, equivalent to 0.66 per cent on the capital invested, and will give an average net profit to each partner of \$325 and to each stockholder of \$53.

## Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	121	\$698,429	13.07	40.36
Not making a profit, . . . . .	35	11,500	3.78	0.67
Totals, . . . . .	156	\$709,929	16.85	41.03
Not answering, . . . . .	770	1,020,549	83.15	58.97
AGGREGATES, . . . . .	926	\$1,730,478	100.00	100.00

*Classified Capital.* [926 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$32,992	1.91
Buildings and fixtures, . . . . .	150,162	8.68
Machinery, . . . . .	76,000	4.39
Implements and tools, . . . . .	161,313	8.74
Cash capital, . . . . .	1,190,066	68.77
Supplied by partners or stockholders, . . . . .	36,761	2.12
Bills payable, accounts on long time, etc., . . . . .	93,175	5.39
TOTAL, . . . . .	\$1,730,478	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$163,154	10.59
Machinery, implements, and tools, . . . . .	227,322	13.13
Cash capital, . . . . .	1,190,066	68.77
Credit capital, . . . . .	129,936	7.61
AGGREGATE, . . . . .	\$1,730,478	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	121	\$1,602,393	13.07	31.22
Not making a profit, . . . . .	35	29,171	3.78	0.57
Totals, . . . . .	156	\$1,631,564	16.85	31.79
Not answering, . . . . .	770	3,501,075	83.15	68.21
AGGREGATES, . . . . .	926	\$5,132,639	100.00	100.00

*Cost of Production.* [156 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	80.80
Salaries, . . . . .	4.20
Wages, . . . . .	6.33
Rent, . . . . .	5.23
Taxes, . . . . .	0.71
Insurance, . . . . .	0.38
Freight, . . . . .	2.04
New equipment, . . . . .	-
Repairs, . . . . .	0.31
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Drugs and Medicines (including Perfumes, Toilet Articles, etc.)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [156 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	48.71
Salaries, . . . . .	2.53
Wages, . . . . .	3.82
Rent, . . . . .	3.15
Taxes, . . . . .	0.43
Insurance, . . . . .	0.23
Freight, . . . . .	1.23
New equipment, . . . . .	—
Repairs, . . . . .	0.19
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*39.71
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 91.27 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[156 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.66
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.57
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*32.48</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>39.71</b>

\* Equivalent to 74.65 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 926 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 156 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 662 employes (both sexes and all ages), . . . . .	*\$374.02
Number of partners, . . . . .	189
Average investment by each partner, . . . . .	‡\$3,127
Average net profit to each partner, . . . . .	‡\$2,334
<i>Corporations.</i>	
Average yearly earnings of 188 employes (both sexes and all ages), . . . . .	†\$344.26
Number of stockholders, . . . . .	18
Average investment by each stockholder, . . . . .	\$6,605
Average net profit to each stockholder, . . . . .	‡\$4,931

\* For 918 private firms.

† For 8 corporations.

‡ Equivalent to 74.65 per cent on average investment.



# Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	22	\$385,966	57.90	74.74
Not making a profit, . . . . .	2	21,200	5.26	4.19
Totals, . . . . .	24	\$407,166	63.16	78.94
Not answering, . . . . .	14	109,278	36.84	21.16
AGGREGATES, . . . . .	38	\$516,444	100.00	100.00

## Classified Capital. [38 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$54,090	10.47
Buildings and fixtures, . . . . .	142,050	27.51
Machinery, . . . . .	45,725	8.85
Implements and tools, . . . . .	18,140	3.51
Cash capital, . . . . .	174,072	33.71
Supplied by partners or stockholders, . . . . .	32,300	6.25
Bills payable, accounts on long time, etc., . . . . .	60,067	9.79
TOTAL, . . . . .	\$516,444	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$196,140	37.98
Machinery, implements, and tools, . . . . .	63,865	12.36
Cash capital, . . . . .	174,072	33.71
Credit capital, . . . . .	82,367	15.95
AGGREGATE, . . . . .	\$516,444	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	22	\$487,884	57.90	72.49
Not making a profit, . . . . .	2	5,374	5.26	0.90
Totals, . . . . .	24	\$493,258	63.16	73.39
Not answering, . . . . .	14	179,830	36.84	26.72
AGGREGATES, . . . . .	38	\$673,088	100.00	100.00

## Cost of Production. [24 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	32.75
Salaries, . . . . .	4.53
Wages, . . . . .	50.60
Rent, . . . . .	1.35
Taxes, . . . . .	0.75
Insurance, . . . . .	0.84
Freight, . . . . .	6.47
New equipment, . . . . .	-
Repairs, . . . . .	2.71
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

# **Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster) — Concluded.**

*Relation of Cost of Production to Selling Price.* [24 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	23.11
Salaries, . . . . .	3.20
Wages, . . . . .	35.70
Rent, . . . . .	0.95
Taxes, . . . . .	0.53
Insurance, . . . . .	0.59
Freight, . . . . .	4.57
New equipment, . . . . .	
Repairs, . . . . .	1.91
Other expenses, . . . . .	
Excess of Selling Price above Cost of Production, . . . . .	*29.44
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 35.57 per cent on amount of capital invested.

## *Distribution of Excess of Selling Price above Cost of Production.* [24 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.05
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.02
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*21.37</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>29.44</b>

\* Equivalent to 25.89 per cent on amount of capital invested.

## *Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 38 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 24 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 366 employes (both sexes and all ages), . . . . .	*\$465.12
Number of partners, . . . . .	31
Average investment by each partner, . . . . .	\$9,869
Average net profit to each partner, . . . . .	†\$2,555
<i>Corporations.</i>	
Average yearly earnings of 204 employes (both sexes and all ages), . . . . .	†\$331.43
Number of stockholders, . . . . .	26
Average investment by each stockholder, . . . . .	\$3,993
Average net profit to each stockholder, . . . . .	†\$1,008

\* For 34 private firms.

† For 4 corporations.

‡ Equivalent to 25.89 per cent on average investment.

**Electrical Apparatus and Appliances.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	21	\$1,516,745	52.50	58.06
Not making a profit, . . . . .	3	414,909	7.50	15.88
Totals, . . . . .	24	\$1,931,654	60.00	73.94
Not answering, . . . . .	16	680,871	40.00	26.06
AGGREGATES, . . . . .	40	\$2,612,525	100.00	100.00

*Classified Capital. [40 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$92,156	3.53
Buildings and fixtures, . . . . .	314,132	12.02
Machinery, . . . . .	1,086,237	41.58
Implements and tools, . . . . .	65,133	2.49
Cash capital, . . . . .	691,205	26.46
Supplied by partners or stockholders, . . . . .	233,220	8.93
Bills payable, accounts on long time, etc., . . . . .	130,442	4.99
TOTAL, . . . . .	\$2,612,525	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$406,288	15.55
Machinery, implements, and tools, . . . . .	1,151,370	44.07
Cash capital, . . . . .	691,205	26.46
Credit capital, . . . . .	363,662	13.92
AGGREGATE, . . . . .	\$2,612,525	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	21	\$558,037	52.50	39.92
Not making a profit, . . . . .	3	66,782	7.50	4.78
Totals, . . . . .	24	\$624,819	60.00	44.70
Not answering, . . . . .	16	772,918	40.00	55.30
AGGREGATES, . . . . .	40	\$1,397,737	100.00	100.00

*Cost of Production. [24 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	41.42
Salaries, . . . . .	9.34
Wages, . . . . .	42.39
Rent, . . . . .	3.50
Taxes, . . . . .	2.34
Insurance, . . . . .	0.49
Freight, . . . . .	0.28
New equipment, . . . . .	-
Repairs, . . . . .	0.24
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Electrical Apparatus and Appliances — Concluded.***Relation of Cost of Production to Selling Price.* [24 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	34.80
Salaries, . . . . .	7.86
Wages, . . . . .	35.63
Rent, . . . . .	2.94
Taxes, . . . . .	1.97
Insurance, . . . . .	0.41
Freight, . . . . .	0.24
New equipment, . . . . .	-
Repairs, . . . . .	0.19
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*15.97
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 5.17 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[24 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	6.24
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	13.63
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net loss, . . . . .</b>	<b>*-8.90</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>15.97</b>

\* Equivalent to a loss of 2.88 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 40 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net loss to each partner or stockholder, are drawn from the 24 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 102 employes (both sexes and all ages), . . . . .	*\$496.34
Number of partners, . . . . .	4
Average investment by each partner, . . . . .	\$8,130
Average net loss to each partner, . . . . .	†\$234
<i>Corporations.</i>	
Average yearly earnings of 652 employes (both sexes and all ages), . . . . .	†\$585.04
Number of stockholders, . . . . .	1,340
Average investment by each stockholder, . . . . .	\$1,417
Average net loss to each stockholder, . . . . .	†\$41

\* For 12 private firms.

† For 28 corporations.

† Equivalent to a loss of 2.88 per cent on average investment.

NOTE. — In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *two per cent* for interest, *four per cent* for depreciation, and *two per cent* for selling expenses, etc., it will leave 6.02 per cent net profit, equivalent to 1.95 per cent on the capital invested, and will give an average net profit to each partner of \$187 and to each stockholder of \$28.

# Electroplating (including Jewelry Burnishing and Lapidary Work).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	28	\$86,245	66.67	75.63
Not making a profit, . . . . .	3	13,350	7.14	11.70
Totals, . . . . .	31	\$99,595	73.81	87.33
Not answering, . . . . .	11	14,445	26.19	12.67
AGGREGATES, . . . . .	42	\$114,040	100.00	100.00

## Classified Capital. [42 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,000	0.88
Buildings and fixtures, . . . . .	5,165	4.53
Machinery, . . . . .	29,690	26.01
Implements and tools, . . . . .	20,785	18.22
Cash capital, . . . . .	56,430	49.48
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	1,000	0.88
TOTAL, . . . . .	\$114,040	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$6,165	5.41
Machinery, implements, and tools, . . . . .	50,445	44.23
Cash capital, . . . . .	56,430	49.48
Credit capital, . . . . .	1,000	0.88
AGGREGATE, . . . . .	\$114,040	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	28	\$211,857	66.67	90.86
Not making a profit, . . . . .	3	12,600	7.14	4.81
Totals, . . . . .	31	\$224,457	73.81	85.67
Not answering, . . . . .	11	37,550	26.19	14.33
AGGREGATES, . . . . .	42	\$262,007	100.00	100.00

## Cost of Production. [31 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	41.56
Salaries, . . . . .	6.26
Wages, . . . . .	43.62
Rent, . . . . .	7.17
Taxes, . . . . .	0.44
Insurance, . . . . .	0.19
Freight, . . . . .	0.82
New equipment, . . . . .	-
Repairs, . . . . .	0.42
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Electroplating (including Jewelry Burnishing and Lapidary Work) — Concluded.**

*Relation of Cost of Production to Selling Price.* [31 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	27.74
Salaries, . . . . .	4.18
Wages, . . . . .	29.10
Rent, . . . . .	4.79
Taxes, . . . . .	0.29
Insurance, . . . . .	0.12
Freight, . . . . .	0.22
New equipment, . . . . .	—
Repairs, . . . . .	0.28
Other expenses, . . . . .	—
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*33.28
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 75.00 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[31 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.12
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.96
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*25.20</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>33.28</b>

\* Equivalent to 56.79 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employ es are drawn from the returns of 42 establishments, the number of private firms being shown in the foot-note. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 31 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 175 employ�es (both sexes and all ages), . . . . .	*\$438.03
Number of partners, . . . . .	38
Average investment by each partner, . . . . .	\$2,621
Average net profit to each partner, . . . . .	†\$1,488

\* For 42 private firms.

† Equivalent to 56.79 per cent on average investment.

**Fancy Articles (including Fine Arts and Taxidermy).***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	15	\$43,510	36.58	69.25
Not making a profit, . . . . .	1	750	2.44	1.19
Totals, . . . . .	16	\$44,260	39.02	70.44
Not answering, . . . . .	25	18,572	60.98	29.56
AGGREGATES, . . . . .	41	\$62,832	100.00	100.00

*Classified Capital. [41 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$300	0.48
Buildings and fixtures, . . . . .	2,000	3.19
Machinery, . . . . .	6,525	10.39
Implements and tools, . . . . .	5,957	9.48
Cash capital, . . . . .	47,150	75.04
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	900	1.43
TOTAL, . . . . .	\$62,832	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$2,300	3.66
Machinery, implements, and tools, . . . . .	12,482	19.57
Cash capital, . . . . .	47,150	75.04
Credit capital, . . . . .	900	1.43
AGGREGATE, . . . . .	\$62,832	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	15	\$73,263	36.58	59.05
Not making a profit, . . . . .	1	4,000	2.44	3.23
Totals, . . . . .	16	\$77,263	39.02	62.28
Not answering, . . . . .	25	46,842	60.98	37.71
AGGREGATES, . . . . .	41	\$124,105	100.00	100.00

*Cost of Production. [16 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	34.30
Salaries, . . . . .	3.16
Wages, . . . . .	48.97
Rent, . . . . .	11.62
Taxes, . . . . .	0.37
Insurance, . . . . .	0.57
Freight, . . . . .	1.11
New equipment, . . . . .	-
Repairs, . . . . .	-
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Fancy Articles (including Fine Arts and Taxidermy)**

—Concluded.

*Relation of Cost of Production to Selling Price.* [16 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	20.15
Salaries, . . . . .	1.86
Wages, . . . . .	28.85
Rent, . . . . .	6.85
Taxes, . . . . .	0.22
Insurance, . . . . .	0.34
Freight, . . . . .	0.65
New equipment, . . . . .	-
Repairs, . . . . .	-
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*41.08
TOTAL, . . . . .	100.00

\* Equivalent to 71.72 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[16 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.19
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.14
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*32.75
TOTAL (percentage of selling price above cost of production), . . . . .	41.08

\* Equivalent to 57.18 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 41 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 16 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 160 employes (both sexes and all ages), . . . . .	*\$211.88
Number of partners, . . . . .	18
Average investment by each partner, . . . . .	\$2,459
Average net profit to each partner, . . . . .	†\$1,406
<i>Corporations.</i>	
Average yearly earnings of 2 employes (both sexes and all ages), . . . . .	†\$200
Number of stockholders, . . . . .	-
Average investment by each stockholder, . . . . .	-
Average net profit to each stockholder, . . . . .	-

\* For 40 private firms.

† For 1 corporation.

‡ Equivalent to 57.18 per cent on average investment.



## Flax, Hemp, and Jute Goods (including Linen).

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	7	\$1,228,500	58.33	50.06
Not making a profit, . . . . .	2	1,100,000	16.67	44.82
Totals, . . . . .	9	\$2,328,500	75.00	94.88
Not answering, . . . . .	3	125,680	25.00	5.12
AGGREGATES, . . . . .	12	\$2,454,180	100.00	100.00

*Classified Capital.* [12 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$135,000	5.50
Buildings and fixtures, . . . . .	515,180	20.99
Machinery, . . . . .	475,500	19.38
Implements and tools, . . . . .	9,480	0.39
Cash capital, . . . . .	658,020	26.81
Supplied by partners or stockholders, . . . . .	160,000	6.52
Bills payable, accounts on long time, etc., . . . . .	501,000	20.41
TOTAL, . . . . .	\$2,454,180	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$650,180	26.49
Machinery, implements, and tools, . . . . .	484,980	19.77
Cash capital, . . . . .	658,020	26.81
Credit capital, . . . . .	661,000	26.93
AGGREGATE, . . . . .	\$2,454,180	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	7	\$1,460,623	58.33	57.01
Not making a profit, . . . . .	2	730,989	16.67	28.53
Totals, . . . . .	9	\$2,191,612	75.00	85.54
Not answering, . . . . .	3	370,500	25.00	14.46
AGGREGATES, . . . . .	12	\$2,562,112	100.00	100.00

*Cost of Production.* [9 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	71.89
Salaries, . . . . .	1.68
Wages, . . . . .	21.91
Rent, . . . . .	0.10
Taxes, . . . . .	0.52
Insurance, . . . . .	0.22
Freight, . . . . .	2.26
New equipment, . . . . .	0.30
Repairs, . . . . .	0.65
Other expenses, . . . . .	0.47
TOTAL, . . . . .	100.00

**Flax, Hemp, and Jute Goods (including Linen) — Concluded.***Relation of Cost of Production to Selling Price.* [9 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	62.47
Salaries, . . . . .	1.46
Wages, . . . . .	18.05
Rent, . . . . .	0.09
Taxes, . . . . .	0.45
Insurance, . . . . .	0.19
Freight, . . . . .	1.96
New equipment, . . . . .	0.26
Repairs, . . . . .	0.56
Other expenses, . . . . .	0.41
Excess of Selling Price above Cost of Production, . . . . .	*13.70
TOTAL, . . . . .	100.00

\* Equivalent to 12.33 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[9 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.86
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.10
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*3.14
TOTAL (percentage of selling price above cost of production), . . . . .	13.10

\* Equivalent to 2.96 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 12 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 9 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 608 employes (both sexes and all ages), . . . . .	*\$237.91
Number of partners, . . . . .	11
Average investment by each partner, . . . . .	\$20,773
Average net profit to each partner, . . . . .	†\$615
<i>Corporations.</i>	
Average yearly earnings of 1,376 employes (both sexes and all ages), . . . . .	†\$247.61
Number of stockholders, . . . . .	41
Average investment by each stockholder, . . . . .	\$51,220
Average net profit to each stockholder, . . . . .	†\$1,516

\* For 9 private firms.

† For 3 corporations.

‡ Equivalent to 2.96 per cent on average investment.

## Food Preparations (including Salt).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	642	\$12,259,081	37.41	58.76
Not making a profit, . . . . .	42	869,422	2.45	4.17
Totals, . . . . .	684	\$13,128,503	39.86	62.93
Not answering, . . . . .	1,032	7,735,143	60.14	37.07
AGGREGATES, . . . . .	1,716	\$20,863,646	100.00	100.00

## Classified Capital. [1,716 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,978,374	9.48
Buildings and fixtures, . . . . .	5,226,439	25.05
Machinery, . . . . .	1,936,741	9.29
Implements and tools, . . . . .	794,975	3.81
Cash capital, . . . . .	9,259,858	44.38
Supplied by partners or stockholders, . . . . .	118,865	0.57
Bills payable, accounts on long time, etc., . . . . .	1,548,394	7.42
TOTAL, . . . . .	\$20,863,646	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$7,204,813	34.53
Machinery, implements, and tools, . . . . .	2,731,716	13.10
Cash capital, . . . . .	9,259,858	44.38
Credit capital, . . . . .	1,667,259	7.99
AGGREGATE, . . . . .	\$20,863,646	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	642	\$45,703,330	37.41	56.75
Not making a profit, . . . . .	42	1,801,616	2.45	2.24
Totals, . . . . .	684	\$47,504,946	39.86	58.99
Not answering, . . . . .	1,032	33,030,273	60.14	41.01
AGGREGATES, . . . . .	1,716	\$80,535,219	100.00	100.00

## Cost of Production. [684 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	90.81
Salaries, . . . . .	0.44
Wages, . . . . .	6.64
Rent, . . . . .	0.52
Taxes, . . . . .	0.23
Insurance, . . . . .	0.30
Freight, . . . . .	0.59
New equipment, . . . . .	*
Repairs, . . . . .	0.29
Other expenses, . . . . .	0.18
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Food Preparations (including Salt) — Concluded.***Relation of Cost of Production to Selling Price.* [684 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	80.16
Salaries, . . . . .	0.59
Wages, . . . . .	5.86
Rent, . . . . .	0.46
Taxes, . . . . .	0.21
Insurance, . . . . .	0.26
Freight, . . . . .	0.53
New equipment, . . . . .	*
Repairs, . . . . .	0.25
Other expenses, . . . . .	0.16
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	†11.72
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Less than one one-hundredth of one per cent.

† Equivalent to 42.42 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[684 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.72
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.36
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*5.64</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>11.72</b>

\* Equivalent to 20.40 per cent on amount of capital invested.

**Comparison of Earnings and Profits.**

[In this table the number and average yearly earnings of employes are drawn from the returns of 1,716 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 684 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 15,751 employes (both sexes and all ages), . . . . .	*\$263.06
Number of partners, . . . . .	865
Average investment by each partner, . . . . .	\$11,142
Average net profit to each partner, . . . . .	†\$2,273
<i>Corporations.</i>	
Average yearly earnings of 2,486 employes (both sexes and all ages), . . . . .	†\$270.22
Number of stockholders, . . . . .	886
Average investment by each stockholder, . . . . .	\$9,042
Average net profit to each stockholder, . . . . .	†\$1,845

\* For 1,633 private firms.

† For 33 corporations.

† Equivalent to 20.40 per cent on average investment.

**Furniture.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	269	\$6,407,079	44.61	68.79
Not making a profit, . . . . .	35	1,239,697	5.80	13.31
Totals, . . . . .	304	\$7,646,776	50.41	82.10
Not answering, . . . . .	299	1,666,781	49.59	17.90
AGGREGATES, . . . . .	603	\$9,313,557	100.00	100.00

*Classified Capital.* [603 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$472,395	5.07
Buildings and fixtures, . . . . .	1,144,686	12.29
Machinery, . . . . .	745,358	8.00
Implements and tools, . . . . .	157,986	1.70
Cash capital, . . . . .	5,685,793	61.05
Supplied by partners or stockholders, . . . . .	311,204	3.34
Bills payable, accounts on long time, etc., . . . . .	796,135	8.55
TOTAL, . . . . .	\$9,313,557	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,617,081	17.36
Machinery, implements, and tools, . . . . .	903,344	9.70
Cash capital, . . . . .	5,685,793	61.05
Credit capital, . . . . .	1,107,339	11.89
AGGREGATE, . . . . .	\$9,313,557	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	269	\$7,687,715	44.61	60.45
Not making a profit, . . . . .	35	1,304,751	5.80	10.26
Totals, . . . . .	304	\$8,992,466	50.41	70.71
Not answering, . . . . .	299	3,724,442	49.59	29.29
AGGREGATES, . . . . .	603	\$12,716,908	100.00	100.00

*Cost of Production.* [304 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	55.01
Salaries, . . . . .	1.96
Wages, . . . . .	35.30
Rent, . . . . .	2.34
Taxes, . . . . .	0.57
Insurance, . . . . .	3.10
Freight, . . . . .	1.49
New equipment, . . . . .	—
Repairs, . . . . .	0.21
Other expenses, . . . . .	—
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Furniture — Concluded.***Relation of Cost of Production to Selling Price.* [304 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	47.48
Salaries, . . . . .	1.71
Wages, . . . . .	30.46
Rent, . . . . .	2.02
Taxes, . . . . .	0.49
Insurance, . . . . .	2.68
Freight, . . . . .	1.29
New equipment, . . . . .	*—
Repairs, . . . . .	0.18
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	†13.69
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Less than one one-hundredth of one per cent.

† Equivalent to 16.10 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[304 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.10
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.83
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*4.76</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>13.69</b>

\* Equivalent to 5.60 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 603 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 304 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 7,432 employes (both sexes and all ages), . . . . .	*\$415.34
Number of partners, . . . . .	416
Average investment by each partner, . . . . .	†\$12,643
Average net profit to each partner, . . . . .	‡\$708
<i>Corporations.</i>	
Average yearly earnings of 1,249 employes (both sexes and all ages), . . . . .	†\$430.10
Number of stockholders, . . . . .	319
Average investment by each stockholder, . . . . .	\$7,484
Average net profit to each stockholder, . . . . .	‡\$419

\* For 558 private firms.

† For 15 corporations.

‡ Equivalent to 5.60 per cent on average investment.

## Gas and Residual Products.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	32	\$7,809,744	48.48	52.54
Not making a profit, . . . . .	3	184,700	4.55	1.24
Totals, . . . . .	35	\$7,994,444	53.03	53.78
Not answering, . . . . .	31	6,871,433	46.97	46.22
AGGREGATES, . . . . .	66	\$14,865,877	100.00	100.00

*Classified Capital.* [66 Establishments.]

DETAILS OF CAPITAL INVESTED.		Amounts	Percentages
Land, . . . . .		\$2,961,578	19.92
Buildings and fixtures, . . . . .		4,420,208	29.74
Machinery, . . . . .		4,684,442	31.51
Implements and tools, . . . . .		722,514	4.86
Cash capital, . . . . .		1,338,490	9.00
Supplied by partners or stockholders, . . . . .		140,193	0.94
Bills payable, accounts on long time, etc., . . . . .		598,452	4.03
TOTAL, . . . . .		\$14,865,877	100.00
<i>Classified Summary.</i>			
Land, buildings, and fixtures, . . . . .		\$7,381,786	49.66
Machinery, implements, and tools, . . . . .		5,406,956	36.37
Cash capital, . . . . .		1,338,490	9.00
Credit capital, . . . . .		738,645	4.97
AGGREGATE, . . . . .		\$14,865,877	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	32	\$2,991,245	48.48	65.40
Not making a profit, . . . . .	3	22,891	4.55	0.50
Totals, . . . . .	35	\$3,014,136	53.03	65.90
Not answering, . . . . .	31	1,559,826	46.97	34.10
AGGREGATES, . . . . .	66	\$4,573,962	100.00	100.00

*Cost of Production.* [35 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	50.06
Salaries, . . . . .	7.42
Wages, . . . . .	24.38
Rent, . . . . .	0.09
Taxes, . . . . .	4.56
Insurance, . . . . .	0.01
Freight, . . . . .	8.27
New equipment, . . . . .	8.62
Repairs, . . . . .	1.69
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

## Gas and Residual Products—Concluded.

*Relation of Cost of Production to Selling Price.* [35 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	31.28
Salaries, . . . . .	4.64
Wages, . . . . .	15.23
Rent, . . . . .	0.06
Taxes, . . . . .	2.85
Insurance, . . . . .	0.01
Freight, . . . . .	2.04
New equipment, . . . . .	5.38
Repairs, . . . . .	1.00
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*37.51
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 14.14 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[35 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.85
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	9.55
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*21.01</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>37.51</b>

\* Equivalent to 7.92 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 66 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of stockholders, the average investment by each stockholder, and the average net profit to each stockholder, are drawn from the 35 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 8 employes (both sexes and all ages), . . . . .	*\$440.50
Number of partners, . . . . .	—
Average investment by each partner, . . . . .	—
Average net profit to each partner, . . . . .	—
<i>Corporations.</i>	
Average yearly earnings of 1,677 employes (both sexes and all ages), . . . . .	†\$397.80
Number of stockholders, . . . . .	2,987
Average investment by each stockholder, . . . . .	\$2,694
Average net profit to each stockholder, . . . . .	‡\$213

\* For 3 private firms.

† For 63 corporations.

‡ Equivalent to 7.92 per cent on average investment.



**Glass.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	12	\$388,487	60.00	42.33
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	12	\$388,487	60.00	42.33
Not answering, . . . . .	8	529,384	40.00	57.67
AGGREGATES, . . . . .	20	\$917,821	100.00	100.00

*Classified Capital.* [20 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$112,500	12.26
Buildings and fixtures, . . . . .	226,280	24.65
Machinery, . . . . .	31,980	3.48
Implements and tools, . . . . .	28,582	3.11
Cash capital, . . . . .	462,949	50.44
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	58,600	6.06
TOTAL, . . . . .	\$917,821	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$338,760	36.91
Machinery, implements, and tools, . . . . .	60,512	6.59
Cash capital, . . . . .	462,949	50.44
Credit capital, . . . . .	58,600	6.06
AGGREGATE, . . . . .	\$917,821	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	12	\$565,584	60.00	51.80
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	12	\$565,584	60.00	51.80
Not answering, . . . . .	8	529,385	40.00	48.20
AGGREGATES, . . . . .	20	\$1,091,949	100.00	100.00

*Cost of Production.* [12 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	38.37
Salaries, . . . . .	7.08
Wages, . . . . .	48.75
Rent, . . . . .	3.74
Taxes, . . . . .	1.06
Insurance, . . . . .	0.22
Freight, . . . . .	0.56
New equipment, . . . . .	-
Repairs, . . . . .	0.22
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

## Glass — Concluded.

*Relation of Cost of Production to Selling Price.* [12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	30.86
Salaries, . . . . .	5.69
Wages, . . . . .	39.21
Rent, . . . . .	8.01
Taxes, . . . . .	0.85
Insurance, . . . . .	0.18
Freight, . . . . .	0.45
New equipment, . . . . .	—
Repairs, . . . . .	0.18
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*19.57
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 28.49 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.94
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.45
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*12.18</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>19.57</b>

\* Equivalent to 17.73 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 20 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 12 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 183 employes (both sexes and all ages), . . . . .	*\$420.60
Number of partners, . . . . .	16
Average investment by each partner, . . . . .	\$5,348
Average net profit to each partner, . . . . .	†\$948
<i>Corporations.</i>	
Average yearly earnings of 907 employes (both sexes and all ages), . . . . .	†\$468.16
Number of stockholders, . . . . .	174
Average investment by each stockholder, . . . . .	\$1,741
Average net profit to each stockholder, . . . . .	†\$309

\* For 14 private firms.

† For 6 corporations.

‡ Equivalent to 17.73 per cent on average investment.

## Glue, Isinglass, and Starch.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	20	\$645,504	68.96	51.11
Not making a profit, . . . . .	2	164,500	6.90	13.02
Totals, . . . . .	22	\$810,004	75.86	64.13
Not answering, . . . . .	7	452,996	24.14	35.87
AGGREGATES, . . . . .	29	\$1,262,999	100.00	100.00

*Classified Capital.* [29 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$94,870	7.51
Buildings and fixtures, . . . . .	246,687	19.58
Machinery, . . . . .	98,925	7.83
Implements and tools, . . . . .	37,059	2.94
Cash capital, . . . . .	707,758	56.04
Supplied by partners or stockholders, . . . . .	32,500	2.57
Bills payable, accounts on long time, etc., . . . . .	45,200	3.58
TOTAL, . . . . .	\$1,262,999	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$341,557	27.04
Machinery, implements, and tools, . . . . .	135,984	10.77
Cash capital, . . . . .	707,758	56.04
Credit capital, . . . . .	77,700	6.16
AGGREGATE, . . . . .	\$1,262,999	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	20	\$760,291	68.96	58.20
Not making a profit, . . . . .	2	177,940	6.90	13.62
Totals, . . . . .	22	\$938,231	75.86	71.82
Not answering, . . . . .	7	368,100	24.14	28.18
AGGREGATES, . . . . .	29	\$1,306,331	100.00	100.00

*Cost of Production.* [22 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	71.25
Salaries, . . . . .	0.89
Wages, . . . . .	16.82
Rent, . . . . .	0.09
Taxes, . . . . .	0.73
Insurance, . . . . .	0.38
Freight, . . . . .	1.33
New equipment, . . . . .	-
Repairs, . . . . .	8.47
Other expenses, . . . . .	0.06
TOTAL, . . . . .	100.00

## Glue, Isinglass, and Starch — Concluded.

*Relation of Cost of Production to Selling Price.* [22 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	66.68
Salaries, . . . . .	0.83
Wages, . . . . .	15.74
Rent, . . . . .	0.09
Taxes, . . . . .	0.67
Insurance, . . . . .	0.36
Freight, . . . . .	1.26
New equipment, . . . . .	-
Repairs, . . . . .	7.92
Other expenses, . . . . .	0.06
Excess of Selling Price above Cost of Production, . . . . .	*6.41
TOTAL, . . . . .	100.00

\* Equivalent to 7.43 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[22 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.68
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.93
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net loss, . . . . .	*-2.20
TOTAL (percentage of selling price above cost of production), . . . . .	6.41

\* Equivalent to a loss of 2.55 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 29 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net loss to each partner or stockholder, are drawn from the 22 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 632 employes (both sexes and all ages), . . . . .	*\$296.10
Number of partners, . . . . .	34
Average investment by each partner, . . . . .	\$23,274
Average net loss to each partner, . . . . .	‡\$593
<i>Corporations.</i>	
Average yearly earnings of 66 employes (both sexes and all ages), . . . . .	†\$214.42
Number of stockholders, . . . . .	8
Average investment by each stockholder, . . . . .	\$2,338
Average net loss to each stockholder, . . . . .	‡\$80

\* For 26 private firms.

† For 3 corporations.

‡ Equivalent to a loss of 2.55 per cent on average investment.

NOTE. — In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of one per cent for interest, two per cent for depreciation, and one per cent for selling expenses, etc., it will leave 4.69 per cent net profit, equivalent to 5.43 per cent on the capital invested, and will give an average net profit to each partner of \$1,265 and to each stockholder of \$127.

## Hair Work (Animal and Human).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	21	\$175,066	38.18	82.84
Not making a profit, . . . . .	1	25	1.82	0.01
Totals, . . . . .	22	\$175,091	40.00	82.85
Not answering, . . . . .	33	36,238	60.00	17.15
AGGREGATES, . . . . .	55	\$211,329	100.00	100.00

## Classified Capital. [55 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$7,200	3.41
Buildings and fixtures, . . . . .	20,855	9.87
Machinery, . . . . .	23,045	10.90
Implements and tools, . . . . .	40,679	19.25
Cash capital, . . . . .	24,525	11.61
Supplied by partners or stockholders, . . . . .	70,000	33.12
Bills payable, accounts on long time, etc., . . . . .	25,025	11.84
TOTAL, . . . . .	\$211,329	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$28,055	13.28
Machinery, implements, and tools, . . . . .	63,724	30.15
Cash capital, . . . . .	24,525	11.61
Credit capital, . . . . .	95,025	44.96
AGGREGATE, . . . . .	\$211,329	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	21	\$352,580	38.18	79.75
Not making a profit, . . . . .	1	24	1.82	—
Totals, . . . . .	22	\$352,554	40.00	79.75
Not answering, . . . . .	33	89,509	60.00	20.25
AGGREGATES, . . . . .	55	\$442,063	100.00	100.00

\* Less than one one-hundredth of one per cent.

## Cost of Production. [22 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	80.73
Salaries, . . . . .	1.58
Wages, . . . . .	13.81
Rent, . . . . .	2.12
Taxes, . . . . .	0.14
Insurance, . . . . .	0.05
Freight, . . . . .	1.10
New equipment, . . . . .	—
Repairs, . . . . .	0.47
Other expenses, . . . . .	—
TOTAL, . . . . .	100.00

**Hair Work (Animal and Human) — Concluded.***Relation of Cost of Production to Selling Price. [22 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	74.75
Salaries, . . . . .	1.47
Wages, . . . . .	12.78
Rent, . . . . .	1.97
Taxes, . . . . .	0.13
Insurance, . . . . .	0.05
Freight, . . . . .	1.02
New equipment, . . . . .	-
Repairs, . . . . .	0.43
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*7.40
TOTAL, . . . . .	100.00

\* Equivalent to 14.91 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
*[22 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.40
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.50
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net loss, . . . . .	*-0.50
TOTAL (percentage of selling price above cost of production), . . . . .	7.40

\* Equivalent to a loss of 1.00 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 55 establishments, the number of private firms being shown in the foot-note. The figures relating to the number of partners, the average investment by each partner, and the average net loss to each partner, are drawn from the 22 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 238 employes (both sexes and all ages), . . . . .	*\$282.86
Number of partners, . . . . .	23
Average investment by each partner, . . . . .	\$7,613
Average net loss to each partner, . . . . .	†\$76

\* For 55 private firms.

† Equivalent to a loss of 1.00 per cent on average investment.

NOTE. — In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of one per cent for interest, two per cent for depreciation, and one per cent for selling expenses, etc., it will leave 5.82 per cent net profit, equivalent to 11.73 per cent on the capital invested, and will give an average net profit to each partner of \$393.

## Hosiery and Knit Goods.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	30	\$3,742,766	50.00	91.94
Not making a profit, . . . . .	2	203,180	3.33	4.99
Totals, . . . . .	32	\$3,945,926	53.33	96.93
Not answering, . . . . .	28	125,045	46.67	3.07
AGGREGATES, . . . . .	60	\$4,070,971	100.00	100.00

*Classified Capital.* [60 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$182,805	4.49
Buildings and fixtures, . . . . .	537,006	13.19
Machinery, . . . . .	1,006,272	24.69
Implements and tools, . . . . .	26,014	0.64
Cash capital, . . . . .	1,212,942	29.80
Supplied by partners or stockholders, . . . . .	99,604	2.45
Bills payable, accounts on long time, etc., . . . . .	1,007,328	24.74
TOTAL, . . . . .	\$4,070,971	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$719,811	17.68
Machinery, implements, and tools, . . . . .	1,031,286	25.33
Cash capital, . . . . .	1,212,942	29.80
Credit capital, . . . . .	1,106,932	27.19
AGGREGATE, . . . . .	\$4,070,971	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab-lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	30	\$3,880,892	50.00	92.48
Not making a profit, . . . . .	2	132,572	3.33	3.16
Totals, . . . . .	32	\$4,013,464	53.33	95.64
Not answering, . . . . .	28	183,058	46.67	4.36
AGGREGATES, . . . . .	60	\$4,196,522	100.00	100.00

*Cost of Production.* [32 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	64.20
Salaries, . . . . .	2.46
Wages, . . . . .	28.77
Rent, . . . . .	0.15
Taxes, . . . . .	0.09
Insurance, . . . . .	0.88
Freight, . . . . .	0.76
New equipment, . . . . .	1.10
Repairs, . . . . .	0.99
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Hosiery and Knit Goods — Concluded.***Relation of Cost of Production to Selling Price.* [32 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	55.01
Salaries, . . . . .	2.11
Wages, . . . . .	24.66
Rent, . . . . .	0.13
Taxes, . . . . .	0.50
Insurance, . . . . .	0.76
Freight, . . . . .	0.65
New equipment, . . . . .	0.94
Repairs, . . . . .	0.85
Other expenses, . . . . .	
Excess of Selling Price above Cost of Production, . . . . .	*14.81
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 14.56 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[32 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.80
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.49
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*4.02</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>14.31</b>

\* Equivalent to 4.09 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 60 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 32 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,593 employes (both sexes and all ages), . . . . .	*\$223.07
Number of partners, . . . . .	37
Average investment by each partner, . . . . .	\$25,296
Average net profit to each partner, . . . . .	†\$1,035
<i>Corporations.</i>	
Average yearly earnings of 2,451 employes (both sexes and all ages), . . . . .	†\$281.35
Number of stockholders, . . . . .	417
Average investment by each stockholder, . . . . .	\$7,218
Average net profit to each stockholder, . . . . .	†\$296

\* For 51 private firms.

† For 9 corporations.

‡ Equivalent to 4.09 per cent on average investment.



# Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	12	\$71,225	44.44	33.46
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	12	\$71,225	44.44	33.46
Not answering, . . . . .	15	141,612	55.56	66.54
AGGREGATES, . . . . .	27	\$212,837	100.00	100.00

## Classified Capital. [27 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$14,900	7.00
Buildings and fixtures, . . . . .	39,625	18.62
Machinery, . . . . .	40,870	19.06
Implements and tools, . . . . .	13,003	6.11
Cash capital, . . . . .	73,357	34.47
Supplied by partners or stockholders, . . . . .	6,000	2.85
Bills payable, accounts on long time, etc., . . . . .	20,382	12.39
TOTAL, . . . . .	\$212,837	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$54,525	25.62
Machinery, implements, and tools, . . . . .	53,873	25.17
Cash capital, . . . . .	73,357	34.47
Credit capital, . . . . .	31,382	14.74
AGGREGATE, . . . . .	\$212,837	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	12	\$109,798	44.44	46.50
Not making a profit, . . . . .	-	-	-	-
Totals, . . . . .	12	\$109,798	44.44	46.50
Not answering, . . . . .	15	126,318	55.56	53.50
AGGREGATES, . . . . .	27	\$236,116	100.00	100.00

## Cost of Production. [12 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	68.75
Salaries, . . . . .	-
Wages, . . . . .	31.95
Rent, . . . . .	3.06
Taxes, . . . . .	0.44
Insurance, . . . . .	0.21
Freight, . . . . .	3.07
New equipment, . . . . .	1.98
Repairs, . . . . .	0.54
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.) — Concluded.**

*Relation of Cost of Production to Selling Price.* [12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	40.00
Salaries, . . . . .	-
Wages, . . . . .	22.08
Rent, . . . . .	2.12
Taxes, . . . . .	0.81
Insurance, . . . . .	0.15
Freight, . . . . .	2.12
New equipment, . . . . .	1.87
Repairs, . . . . .	0.87
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*30.88
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 47.61 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.00
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.63
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*22.65</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>30.88</b>

\* Equivalent to 34.92 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 27 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 12 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 102 employes (both sexes and all ages), . . . . .	*\$321.48
Number of partners, . . . . .	18
Average investment by each partner, . . . . .	\$3,957
Average net profit to each partner, . . . . .	†\$1,382
<i>Corporations.</i>	
Average yearly earnings of 58 employes (both sexes and all ages), . . . . .	†\$256.90
Number of stockholders, . . . . .	-
Average investment by each stockholder, . . . . .	-
Average net profit to each stockholder, . . . . .	-

\* For 25 private firms.

† For 2 corporations.

‡ Equivalent to 34.92 per cent on average investment.

## Ivory, Bone, Shell, and Horn Goods.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab-lishments	Amount of Capital In-vested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	24	\$1,747,043	61.54	72.45
Not making a profit, . . . . .	1	8,700	2.56	0.36
Totals, . . . . .	25	\$1,755,743	64.10	72.81
Not answering, . . . . .	14	655,568	35.90	27.19
AGGREGATES, . . . . .	39	\$2,411,301	100.00	100.00

*Classified Capital.* [39 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$73,368	3.04
Buildings and fixtures, . . . . .	262,408	10.88
Machinery, . . . . .	394,230	16.35
Implements and tools, . . . . .	256,967	10.66
Cash capital, . . . . .	490,908	20.36
Supplied by partners or stockholders, . . . . .	310,000	12.86
Bills payable, accounts on long time, etc., . . . . .	623,420	25.85
TOTAL, . . . . .	\$2,411,301	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$335,776	13.92
Machinery, implements, and tools, . . . . .	651,197	27.01
Cash capital, . . . . .	490,908	20.36
Credit capital, . . . . .	933,420	38.71
AGGREGATE, . . . . .	\$2,411,301	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab-lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	24	\$1,353,243	61.54	83.10
Not making a profit, . . . . .	1	64,900	2.56	3.37
Totals, . . . . .	25	\$1,408,143	64.10	86.47
Not answering, . . . . .	14	220,270	35.90	13.53
AGGREGATES, . . . . .	39	\$1,628,413	100.00	100.00

*Cost of Production.* [25 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	67.52
Salaries, . . . . .	3.40
Wages, . . . . .	25.04
Rent, . . . . .	0.70
Taxes, . . . . .	0.36
Insurance, . . . . .	0.35
Freight, . . . . .	1.62
New equipment, . . . . .	-
Repairs, . . . . .	1.11
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Ivory, Bone, Shell, and Horn Goods — Concluded.***Relation of Cost of Production to Selling Price.* [25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	46.41
Salaries, . . . . .	2.34
Wages, . . . . .	17.31
Rent, . . . . .	0.43
Taxes, . . . . .	0.24
Insurance, . . . . .	0.24
Freight, . . . . .	1.05
New equipment, . . . . .	—
Repairs, . . . . .	0.76
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*31.27
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 25.08 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.68
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	3.37
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*19.22</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>31.27</b>

\* Equivalent to 15.42 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 39 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 25 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 538 employes (both sexes and all ages), . . . . .	*\$316.00
Number of partners, . . . . .	35
Average investment by each partner, . . . . .	\$3,630
Average net profit to each partner, . . . . .	†\$1,330
<i>Corporations.</i>	
Average yearly earnings of 436 employes (both sexes and all ages), . . . . .	†\$369.43
Number of stockholders, . . . . .	74
Average investment by each stockholder, . . . . .	\$19,645
Average net profit to each stockholder, . . . . .	†\$3,029

\* For 35 private firms.

† For 4 corporations.

‡ Equivalent to 15.42 per cent on average investment.

**Leather.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	340	\$7,351,502	48.64	59.97
Not making a profit, . . . . .	27	1,620,507	3.86	13.29
Totals, . . . . .	367	\$8,981,009	52.50	73.26
Not answering, . . . . .	332	3,277,822	47.50	26.74
AGGREGATES, . . . . .	699	\$12,258,831	100.00	100.00

*Classified Capital.* [699 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$665,180	5.43
Buildings and fixtures, . . . . .	1,473,244	12.02
Machinery, . . . . .	972,387	7.98
Implements and tools, . . . . .	288,026	2.36
Cash capital, . . . . .	6,621,554	54.01
Supplied by partners or stockholders, . . . . .	428,300	3.49
Bills payable, accounts on long time, etc., . . . . .	1,810,211	14.77
TOTAL, . . . . .	\$12,258,831	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$2,138,404	17.46
Machinery, implements, and tools, . . . . .	1,260,392	10.28
Cash capital, . . . . .	6,621,554	54.01
Credit capital, . . . . .	2,238,511	18.26
AGGREGATE, . . . . .	\$12,258,831	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	340	\$18,404,460	48.64	65.71
Not making a profit, . . . . .	27	2,883,864	3.86	10.30
Totals, . . . . .	367	\$21,288,324	52.50	76.01
Not answering, . . . . .	332	6,720,527	47.50	23.99
AGGREGATES, . . . . .	699	\$28,008,851	100.00	100.00

*Cost of Production.* [367 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	78.96
Salaries, . . . . .	0.73
Wages, . . . . .	17.07
Rent, . . . . .	0.60
Taxes, . . . . .	0.26
Insurance, . . . . .	0.31
Freight, . . . . .	1.71
New equipment, . . . . .	*—
Repairs, . . . . .	0.39
Other expenses, . . . . .	*—
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Leather — Concluded.***Relation of Cost of Production to Selling Price.* [367 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	70.75
Salaries, . . . . .	0.66
Wages, . . . . .	15.30
Rent, . . . . .	0.52
Taxes, . . . . .	0.22
Insurance, . . . . .	0.28
Freight, . . . . .	1.54
New equipment, . . . . .	*—
Repairs, . . . . .	0.36
Other expenses, . . . . .	*—
Excess of Selling Price above Cost of Production, . . . . .	†10.39
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Less than one one-hundredth of one per cent.

† Equivalent to 24.62 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[367 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.53
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.43
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*3.43</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>10.39</b>

\* Equivalent to 8.13 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 699 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 367 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 9,559 employes (both sexes and all ages), . . . . .	*\$442.15
Number of partners, . . . . .	489
Average investment by each partner, . . . . .	†\$17,321
Average net profit to each partner, . . . . .	‡\$1,408
<i>Corporations.</i>	
Average yearly earnings of 171 employes (both sexes and all ages), . . . . .	†\$509.45
Number of stockholders, . . . . .	89
Average investment by each stockholder, . . . . .	\$13,098
Average net profit to each stockholder, . . . . .	‡\$1,065

\* For 693 private firms.

† For 6 corporations.

‡ Equivalent to 8.13 per cent on average investment.

## Liquors and Beverages (Not Spirituous).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	24	\$180,387	38.09	42.10
Not making a profit, . . . . .	1	2,000	1.59	0.47
Totals, . . . . .	25	\$182,387	39.68	42.57
Not answering, . . . . .	38	246,060	60.32	57.43
AGGREGATES, . . . . .	63	\$428,447	100.00	100.00

## Classified Capital. [63 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$23,975	5.60
Buildings and fixtures, . . . . .	60,550	14.13
Machinery, . . . . .	108,477	25.32
Implements and tools, . . . . .	30,960	7.23
Cash capital, . . . . .	176,502	41.19
Supplied by partners or stockholders, . . . . .	12,100	2.82
Bills payable, accounts on long time, etc., . . . . .	15,883	3.71
TOTAL, . . . . .	\$428,447	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$84,525	19.73
Machinery, implements, and tools, . . . . .	139,437	32.56
Cash capital, . . . . .	176,502	41.19
Credit capital, . . . . .	27,983	6.53
AGGREGATE, . . . . .	\$428,447	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	24	\$240,846	38.09	37.56
Not making a profit, . . . . .	1	5,000	1.59	0.78
Totals, . . . . .	25	\$245,846	39.68	38.34
Not answering, . . . . .	38	395,370	60.32	61.66
AGGREGATES, . . . . .	63	\$641,216	100.00	100.00

## Cost of Production. [25 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	55.96
Salaries, . . . . .	5.77
Wages, . . . . .	28.96
Rent, . . . . .	4.92
Taxes, . . . . .	0.88
Insurance, . . . . .	0.41
Freight, . . . . .	2.22
New equipment, . . . . .	-
Repairs, . . . . .	0.33
Other expenses, . . . . .	0.56
TOTAL, . . . . .	100.00

**Liquors and Beverages (Not Spirituous) — Concluded.***Relation of Cost of Production to Selling Price.* [25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	37.80
Salaries, . . . . .	3.89
Wages, . . . . .	19.55
Rent, . . . . .	3.32
Taxes, . . . . .	0.56
Insurance, . . . . .	0.28
Freight, . . . . .	1.50
New equipment, . . . . .	—
Repairs, . . . . .	0.22
Other expenses, . . . . .	0.40
Excess of Selling Price above Cost of Production, . . . . .	*32.48
TOTAL, . . . . .	100.00

\* Equivalent to 43.78 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.77
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.41
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*23.30
TOTAL (percentage of selling price above cost of production), . . . . .	32.48

\* Equivalent to 31.39 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 63 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 25 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 291 employes (both sexes and all ages), . . . . .	*\$378.56
Number of partners, . . . . .	84
Average investment by each partner, . . . . .	\$5,124
Average net profit to each partner, . . . . .	†\$1,609
<i>Corporations.</i>	
Average yearly earnings of 33 employes (both sexes and all ages), . . . . .	†\$296.86
Number of stockholders, . . . . .	19
Average investment by each stockholder, . . . . .	\$429
Average net profit to each stockholder, . . . . .	†\$135

\* For 61 private firms.

† For 2 corporations.

‡ Equivalent to 31.39 per cent on average investment.



**Liquors: Malt, Distilled, and Fermented.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	86	\$4,344,858	39.45	70.41
Not making a profit, . . . . .	6	42,315	2.75	0.60
Totals, . . . . .	92	\$4,387,173	42.20	71.10
Not answering, . . . . .	126	1,783,124	57.80	28.90
AGGREGATES, . . . . .	218	\$6,170,297	100.00	100.00

*Classified Capital. [218 Establishments.]*

DETAILS OF CAPITAL INVESTED.		Amounts	Percentages
Land, . . . . .		\$780,776	12.65
Buildings and fixtures, . . . . .		1,795,893	29.10
Machinery, . . . . .		966,005	15.66
Implements and tools, . . . . .		801,367	4.88
Cash capital, . . . . .		1,955,181	31.60
Supplied by partners or stockholders, . . . . .		-	-
Bills payable, accounts on long time, etc., . . . . .		371,275	6.02
TOTAL, . . . . .		\$6,170,297	100.00
<i>Classified Summary.</i>			
Land, buildings, and fixtures, . . . . .		\$2,576,469	41.75
Machinery, implements, and tools, . . . . .		1,267,372	20.54
Cash capital, . . . . .		1,955,181	31.60
Credit capital, . . . . .		371,275	6.02
AGGREGATE, . . . . .		\$6,170,297	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	86	\$5,215,586	39.45	66.18
Not making a profit, . . . . .	6	82,994	2.75	0.42
Totals, . . . . .	92	\$5,248,579	42.20	66.60
Not answering, . . . . .	126	2,632,661	57.80	33.40
AGGREGATES, . . . . .	218	\$7,881,240	100.00	100.00

*Cost of Production. [92 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	74.53
Salaries, . . . . .	3.26
Wages, . . . . .	13.53
Rent, . . . . .	1.06
Taxes, . . . . .	0.81
Insurance, . . . . .	0.33
Freight, . . . . .	1.01
New equipment, . . . . .	-
Repairs, . . . . .	5.61
Other expenses, . . . . .	0.07
TOTAL, . . . . .	100.00

**Liquors: Malt, Distilled, and Fermented — Concluded.***Relation of Cost of Production to Selling Price.* [92 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	53.13
Salaries, . . . . .	2.32
Wages, . . . . .	9.50
Rent, . . . . .	0.75
Taxes, . . . . .	0.58
Insurance, . . . . .	0.24
Freight, . . . . .	0.72
New equipment, . . . . .	-
Repairs, . . . . .	4.00
Other expenses, . . . . .	0.05
Excess of Selling Price above Cost of Production, . . . . .	*28.71
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 34.35 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[92 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.58
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.72
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*20.41</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>28.71</b>

\* Equivalent to 24.43 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 218 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 92 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,603 employes (both sexes and all ages), . . . . .	*\$426.67
Number of partners, . . . . .	124
Average investment by each partner, . . . . .	\$30,938
Average net profit to each partner, . . . . .	†\$7,556
<i>Corporations.</i>	
Average yearly earnings of 125 employes (both sexes and all ages), . . . . .	†\$760.54
Number of stockholders, . . . . .	89
Average investment by each stockholder, . . . . .	\$6,189
Average net profit to each stockholder, . . . . .	†\$1,512

\* For 215 private firms.

† For 3 corporations.

‡ Equivalent to 24.43 per cent on average investment.

## Lumber.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	190	\$1,357,768	40.77	46.55
Not making a profit, . . . . .	27	205,309	5.80	7.04
Totals, . . . . .	217	\$1,563,077	46.57	53.59
Not answering, . . . . .	249	1,353,657	53.43	46.41
AGGREGATES, . . . . .	466	\$2,916,634	100.00	100.00

*Classified Capital.* [466 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$388,938	13.33
Buildings and fixtures, . . . . .	619,724	21.25
Machinery, . . . . .	561,335	19.25
Implements and tools, . . . . .	75,089	2.57
Cash capital, . . . . .	1,066,593	36.57
Supplied by partners or stockholders, . . . . .	16,907	0.58
Bills payable, accounts on long time, etc., . . . . .	188,045	6.45
TOTAL, . . . . .	\$2,916,634	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,008,662	34.58
Machinery, implements, and tools, . . . . .	636,427	21.82
Cash capital, . . . . .	1,066,593	36.57
Credit capital, . . . . .	204,952	7.03
AGGREGATE, . . . . .	\$2,916,634	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	190	\$1,759,903	40.77	48.52
Not making a profit, . . . . .	27	151,956	5.80	4.19
Totals, . . . . .	217	\$1,911,859	46.57	52.71
Not answering, . . . . .	249	1,715,486	53.43	47.29
AGGREGATES, . . . . .	466	\$3,627,345	100.00	100.00

*Cost of Production.* [217 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	71.04
Salaries, . . . . .	0.71
Wages, . . . . .	21.15
Rent, . . . . .	0.47
Taxes, . . . . .	0.72
Insurance, . . . . .	0.70
Freight, . . . . .	3.47
New equipment, . . . . .	0.08
Repairs, . . . . .	1.62
Other expenses, . . . . .	0.04
TOTAL, . . . . .	100.00

## Lumber — Concluded.

*Relation of Cost of Production to Selling Price.* [217 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	59.44
Salaries, . . . . .	0.59
Wages, . . . . .	17.69
Rent, . . . . .	0.40
Taxes, . . . . .	0.60
Insurance, . . . . .	0.59
Freight, . . . . .	2.91
New equipment, . . . . .	0.06
Repairs, . . . . .	1.36
Other expenses, . . . . .	0.03
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*16.33
TOTAL, . . . . .	100.00

\* Equivalent to 19.98 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[217 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.78
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.78
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*7.77
TOTAL (percentage of selling price above cost of production), . . . . .	16.33

\* Equivalent to 9.50 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 466 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 217 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,951 employes (both sexes and all ages), . . . . .	*\$266.58
Number of partners, . . . . .	292
Average investment by each partner, . . . . .	\$4,668
Average net profit to each partner, . . . . .	†\$444
<i>Corporations.</i>	
Average yearly earnings of 267 employes (both sexes and all ages), . . . . .	†\$370.62
Number of stockholders, . . . . .	32
Average investment by each stockholder, . . . . .	\$6,251
Average net profit to each stockholder, . . . . .	†\$594

\* For 466 private firms.

† For 6 corporations.

‡ Equivalent to 9.50 per cent on average investment.

**Machines and Machinery.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	367	\$14,111,975	59.00	57.04
Not making a profit, . . . . .	35	4,073,439	5.63	16.46
Totals, . . . . .	402	\$18,185,414	64.63	73.50
Not answering, . . . . .	220	6,558,263	35.37	26.50
AGGREGATES, . . . . .	622	\$24,743,677	100.00	100.00

*Classified Capital. [622 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,680,434	6.79
Buildings and fixtures, . . . . .	3,931,939	15.89
Machinery, . . . . .	4,934,987	19.94
Implements and tools, . . . . .	1,377,384	5.57
Cash capital, . . . . .	9,675,660	39.10
Supplied by partners or stockholders, . . . . .	630,578	2.55
Bills payable, accounts on long time, etc., . . . . .	2,512,695	10.16
TOTAL, . . . . .	\$24,743,677	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$5,612,373	22.68
Machinery, implements, and tools, . . . . .	6,312,371	25.51
Cash capital, . . . . .	9,675,660	39.10
Credit capital, . . . . .	3,143,273	12.71
AGGREGATE, . . . . .	\$24,743,677	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	367	\$13,373,483	59.00	65.66
Not making a profit, . . . . .	35	1,376,185	5.63	6.78
Totals, . . . . .	402	\$14,749,668	64.63	72.42
Not answering, . . . . .	220	5,616,302	35.37	27.58
AGGREGATES, . . . . .	622	\$20,365,970	100.00	100.00

*Cost of Production. [402 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	45.92
Salaries, . . . . .	5.97
Wages, . . . . .	43.36
Rent, . . . . .	1.34
Taxes, . . . . .	1.10
Insurance, . . . . .	0.53
Freight, . . . . .	1.00
New equipment, . . . . .	0.06
Repairs, . . . . .	0.64
Other expenses, . . . . .	0.08
TOTAL, . . . . .	100.00

**Machines and Machinery — Concluded.***Relation of Cost of Production to Selling Price.* [402 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	86.89
Salaries, . . . . .	4.80
Wages, . . . . .	34.83
Rent, . . . . .	1.08
Taxes, . . . . .	0.88
Insurance, . . . . .	0.42
Freight, . . . . .	0.80
New equipment, . . . . .	0.05
Repairs, . . . . .	0.51
Other expenses, . . . . .	0.07
Excess of Selling Price above Cost of Production, . . . . .	*19.67
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 15.96 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[402 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.19
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	3.15
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*8.33</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>19.67</b>

\* Equivalent to 6.76 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 622 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 402 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 7,051 employes (both sexes and all ages), . . . . .	*\$405.20
Number of partners, . . . . .	499
Average investment by each partner, . . . . .	\$11,241
Average net profit to each partner, . . . . .	‡\$760
<i>Corporations.</i>	
Average yearly earnings of 9,598 employes (both sexes and all ages), . . . . .	†\$457.68
Number of stockholders, . . . . .	1,181
Average investment by each stockholder, . . . . .	\$10,649
Average net profit to each stockholder, . . . . .	‡\$720

\* For 529 private firms.

† For 93 corporations.

‡ Equivalent to 6.76 per cent on average investment.

**Metals and Metallic Goods (including Clocks and Watches).***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Capital Invested
Making a profit, . . . . .	1,056	\$26,181,549	38.00	67.91
Not making a profit, . . . . .	92	2,723,359	3.31	7.08
Totals, . . . . .	1,148	\$28,909,908	41.31	74.99
Not answering, . . . . .	1,631	9,641,378	58.69	25.01
AGGREGATES, . . . . .	2,779	\$38,551,286	100.00	100.00

*Classified Capital.* [2,779 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$2,467,110	6.40
Buildings and fixtures, . . . . .	5,201,400	13.49
Machinery, . . . . .	5,820,221	15.10
Implements and tools, . . . . .	1,560,212	4.07
Cash capital, . . . . .	16,294,818	42.27
Supplied by partners or stockholders, . . . . .	3,029,497	7.86
Bills payable, accounts on long time, etc., . . . . .	4,169,033	10.81
TOTAL, . . . . .	\$38,551,286	100.00
<i>Classified Summary</i>		
Land, buildings, and fixtures, . . . . .	\$7,668,510	19.89
Machinery, implements, and tools, . . . . .	7,389,433	19.17
Cash capital, . . . . .	16,294,813	42.27
Credit capital, . . . . .	7,198,530	18.67
AGGREGATE, . . . . .	\$38,551,286	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Selling Price
Making a profit, . . . . .	1,056	\$28,942,954	38.00	64.81
Not making a profit, . . . . .	92	1,893,559	3.31	4.24
Totals, . . . . .	1,148	\$30,836,513	41.31	69.05
Not answering, . . . . .	1,631	13,820,691	58.69	30.95
AGGREGATES, . . . . .	2,779	\$44,657,204	100.00	100.00

*Cost of Production.* [1,148 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	55.74
Salaries, . . . . .	3.10
Wages, . . . . .	36.47
Rent, . . . . .	1.19
Taxes, . . . . .	0.68
Insurance, . . . . .	0.36
Freight, . . . . .	1.73
New equipment, . . . . .	0.05
Repairs, . . . . .	0.63
Other expenses, . . . . .	0.05
TOTAL, . . . . .	100.00

**Metals and Metallic Goods (including Clocks and Watches)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [1,148 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	45.21
Salaries, . . . . .	2.52
Wages, . . . . .	29.58
Rent, . . . . .	0.96
Taxes, . . . . .	0.55
Insurance, . . . . .	0.29
Freight, . . . . .	1.41
New equipment, . . . . .	0.04
Repairs, . . . . .	0.51
Other expenses, . . . . .	0.04
Excess of Selling Price above Cost of Production, . . . . .	*18.89
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 20.15 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[1,148 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.86
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.80
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*9.23</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>18.89</b>

\* Equivalent to 9.85 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 2,779 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 1,148 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 14,361 employes (both sexes and all ages), . . . . .	*\$423.59
Number of partners, . . . . .	1,417
Average investment by each partner, . . . . .	\$6,399
Average net profit to each partner, . . . . .	†\$630
<i>Corporations.</i>	
Average yearly earnings of 15,771 employes (both sexes and all ages), . . . . .	†\$436.68
Number of stockholders, . . . . .	2,455
Average investment by each stockholder, . . . . .	\$8,082
Average net profit to each stockholder, . . . . .	†\$796

\* For 2,674 private firms.

† For 105 corporations.

‡ Equivalent to 9.85 per cent on average investment.



## Models and Patterns.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Capital Invested
Making a profit, . . . . .	36	\$69,005	70.59	71.12
Not making a profit, . . . . .	1	400	1.98	0.41
Totals, . . . . .	37	\$70,005	72.55	71.53
Not answering, . . . . .	14	27,860	27.45	28.47
AGGREGATES, . . . . .	51	\$97,865	100.00	100.00

*Classified Capital. [51 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$650	0.66
Buildings and fixtures, . . . . .	4,267	4.36
Machinery, . . . . .	29,823	30.47
Implements and tools, . . . . .	19,305	19.73
Cash capital, . . . . .	38,575	39.42
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	5,245	5.36
TOTAL, . . . . .	\$97,865	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$4,917	5.02
Machinery, implements, and tools, . . . . .	49,128	50.20
Cash capital, . . . . .	38,575	39.42
Credit capital, . . . . .	5,245	5.36
AGGREGATE, . . . . .	\$97,865	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Selling Price
Making a profit, . . . . .	36	\$171,891	70.59	66.56
Not making a profit, . . . . .	1	4,000	1.96	1.55
Totals, . . . . .	37	\$175,891	72.55	68.11
Not answering, . . . . .	14	82,361	27.45	31.89
AGGREGATES, . . . . .	51	\$258,242	100.00	100.00

*Cost of Production. [37 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	24.30
Salaries, . . . . .	0.92
Wages, . . . . .	64.96
Rent, . . . . .	8.66
Taxes, . . . . .	0.52
Insurance, . . . . .	0.40
Freight, . . . . .	0.24
New equipment, . . . . .	-
Repairs, . . . . .	-
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Models and Patterns — Concluded.***Relation of Cost of Production to Selling Price.* [37 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	15.08
Salaries, . . . . .	0.57
Wages, . . . . .	40.32
Rent, . . . . .	5.38
Taxes, . . . . .	0.32
Insurance, . . . . .	0.25
Freight, . . . . .	0.18
New equipment, . . . . .	-
Repairs, . . . . .	-
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*37.93
TOTAL, . . . . .	100.00

\* Equivalent to 95.31 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[37 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.89
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.00
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*30.04
TOTAL (percentage of selling price above cost of production), . . . . .	37.93

\* Equivalent to 75.48 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 51 establishments, the number of private firms being shown in the foot-note. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 37 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 180 employes (both sexes and all ages), . . . . .	*\$514.01
Number of partners, . . . . .	40
Average investment by each partner, . . . . .	\$1,750
Average net profit to each partner, . . . . .	†\$1,321

\* For 51 private firms.

† Equivalent to 75.48 per cent on average investment.

## Musical Instruments and Materials.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	63	\$3,132,062	67.74	63.27
Not making a profit, . . . . .	2	126,800	2.15	2.56
Totals, . . . . .	65	\$3,258,862	69.89	65.83
Not answering, . . . . .	28	1,601,354	30.11	34.17
AGGREGATES, . . . . .	93	\$4,950,216	100.00	100.00

## Classified Capital. [93 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$547,086	11.05
Buildings and fixtures, . . . . .	951,592	19.22
Machinery, . . . . .	446,316	9.02
Implements and tools, . . . . .	118,870	2.40
Cash capital, . . . . .	1,948,758	39.37
Supplied by partners or stockholders, . . . . .	10,349	0.21
Bills payable, accounts on long time, etc., . . . . .	927,245	18.73
TOTAL, . . . . .	\$4,950,216	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,498,678	30.27
Machinery, implements, and tools, . . . . .	565,186	11.42
Cash capital, . . . . .	1,948,758	39.37
Credit capital, . . . . .	937,594	18.94
AGGREGATE, . . . . .	\$4,950,216	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	63	\$4,212,212	67.74	68.55
Not making a profit, . . . . .	2	239,000	2.15	3.89
Totals, . . . . .	65	\$4,451,212	69.89	72.44
Not answering, . . . . .	28	1,693,796	30.11	27.56
AGGREGATES, . . . . .	93	\$6,145,008	100.00	100.00

## Cost of Production. [65 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	51.41
Salaries, . . . . .	4.24
Wages, . . . . .	39.89
Rent, . . . . .	2.19
Taxes, . . . . .	0.47
Insurance, . . . . .	0.41
Freight, . . . . .	0.79
New equipment, . . . . .	—
Repairs, . . . . .	0.50
Other expenses, . . . . .	0.10
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Musical Instruments and Materials — Concluded.***Relation of Cost of Production to Selling Price.* [65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	41.31
Salaries, . . . . .	3.40
Wages, . . . . .	32.06
Rent, . . . . .	1.76
Taxes, . . . . .	0.38
Insurance, . . . . .	0.33
Freight, . . . . .	0.63
New equipment, . . . . .	*_
Repairs, . . . . .	0.40
Other expenses, . . . . .	0.08
Excess of Selling Price above Cost of Production, . . . . .	†19.65
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

† Equivalent to 26.83 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.13
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.84
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*11.83
TOTAL (percentage of selling price above cost of production), . . . . .	19.65

\* Equivalent to 15.95 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 93 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 65 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 2,235 employes (both sexes and all ages), . . . . .	*\$582.09
Number of partners, . . . . .	81
Average investment by each partner, . . . . .	\$19,179
Average net profit to each partner, . . . . .	†\$3,059
<i>Corporations.</i>	
Average yearly earnings of 1,119 employes (both sexes and all ages), . . . . .	†\$681.20
Number of stockholders, . . . . .	147
Average investment by each stockholder, . . . . .	\$11,601
Average net profit to each stockholder, . . . . .	†\$1,850

\* For 82 private firms.

† For 11 corporations.

† Equivalent to 15.95 per cent on average investment.

## Oils and Illuminating Fluids.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	7	\$379,710	25.00	21.21
Not making a profit, . . . . .	8	723,598	10.71	40.41
Totals, . . . . .	10	\$1,103,308	35.71	61.62
Not answering, . . . . .	18	687,093	64.29	38.38
AGGREGATES, . . . . .	28	\$1,790,401	100.00	100.00

*Classified Capital.* [28 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$270,976	15.14
Buildings and fixtures, . . . . .	243,812	13.62
Machinery, . . . . .	140,763	7.86
Implements and tools, . . . . .	48,076	2.69
Cash capital, . . . . .	643,725	35.95
Supplied by partners or stockholders, . . . . .	255,000	14.24
Bills payable, accounts on long time, etc., . . . . .	188,059	10.50
TOTAL, . . . . .	\$1,790,401	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$514,788	28.76
Machinery, implements, and tools, . . . . .	188,829	10.55
Cash capital, . . . . .	643,725	35.95
Credit capital, . . . . .	443,059	24.74
AGGREGATE, . . . . .	\$1,790,401	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	7	\$564,001	25.00	24.57
Not making a profit, . . . . .	3	810,542	10.71	35.32
Totals, . . . . .	10	\$1,374,543	35.71	59.89
Not answering, . . . . .	18	920,388	64.29	40.11
AGGREGATES, . . . . .	28	\$2,294,931	100.00	100.00

*Cost of Production.* [10 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	84.81
Salaries, . . . . .	1.49
Wages, . . . . .	8.19
Rent, . . . . .	0.38
Taxes, . . . . .	0.34
Insurance, . . . . .	0.05
Freight, . . . . .	3.88
New equipment, . . . . .	0.09
Repairs, . . . . .	0.77
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Oils and Illuminating Fluids — Concluded.***Relation of Cost of Production to Selling Price.* [10 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	84.15
Salaries, . . . . .	1.48
Wages, . . . . .	8.13
Rent, . . . . .	0.88
Taxes, . . . . .	0.34
Insurance, . . . . .	0.04
Freight, . . . . .	8.85
New equipment, . . . . .	0.09
Repairs, . . . . .	0.76
Other expenses, . . . . .	-
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*0.78
TOTAL, . . . . .	100.00

\* Equivalent to 0.98 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[10 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.42
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.84
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net loss, . . . . .	*-7.48
TOTAL (percentage of selling price above cost of production), . . . . .	0.78

\* Equivalent to a loss of 9.34 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 28 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net loss to each partner or stockholder, are drawn from the 10 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 193 employes (both sexes and all ages), . . . . .	*\$427.93
Number of partners, . . . . .	14
Average investment by each partner, . . . . .	\$44,933
Average net loss to each partner, . . . . .	†\$4,198
<i>Corporations.</i>	
Average yearly earnings of 328 employes (both sexes and all ages), . . . . .	†\$377.01
Number of stockholders, . . . . .	5
Average investment by each stockholder, . . . . .	\$94,849
Average net loss to each stockholder, . . . . .	†\$8,860

\* For 24 private firms.

† For 4 corporations.

† Equivalent to a loss of 9.34 per cent on average investment.

NOTE. — In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit.

**Paints, Colors, and Crude Chemicals (including Dyestuffs).***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	16	\$817,578	51.61	73.17
Not making a profit, . . . . .	2	142,306	6.45	12.74
Totals, . . . . .	18	\$959,884	58.06	85.91
Not answering, . . . . .	13	157,465	41.94	14.09
AGGREGATES, . . . . .	31	\$1,117,349	100.00	100.00

*Classified Capital.* [31 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$75,086	6.72
Buildings and fixtures, . . . . .	182,537	16.34
Machinery, . . . . .	164,994	14.77
Implements and tools, . . . . .	14,145	1.26
Cash capital, . . . . .	472,460	42.28
Supplied by partners or stockholders, . . . . .	84,000	7.52
Bills payable, accounts on long time, etc., . . . . .	124,137	11.11
TOTAL, . . . . .	\$1,117,349	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$257,623	23.06
Machinery, implements, and tools, . . . . .	179,139	16.03
Cash capital, . . . . .	472,460	42.28
Credit capital, . . . . .	208,137	18.63
AGGREGATE, . . . . .	\$1,117,349	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	16	\$1,016,415	51.61	65.45
Not making a profit, . . . . .	2	133,156	6.45	8.57
Totals, . . . . .	18	\$1,149,571	58.06	74.02
Not answering, . . . . .	13	403,436	41.94	25.98
AGGREGATES, . . . . .	31	\$1,553,007	100.00	100.00

*Cost of Production.* [18 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	75.33
Salaries, . . . . .	5.16
Wages, . . . . .	11.92
Rent, . . . . .	0.48
Taxes, . . . . .	0.35
Insurance, . . . . .	0.50
Freight, . . . . .	4.92
New equipment, . . . . .	-
Repairs, . . . . .	1.23
Other expenses, . . . . .	0.11
TOTAL, . . . . .	100.00

**Paints, Colors, and Crude Chemicals (including Dyestuffs)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [18 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	67.92
Salaries, . . . . .	4.65
Wages, . . . . .	10.75
Rent, . . . . .	0.43
Taxes, . . . . .	0.31
Insurance, . . . . .	0.45
Freight, . . . . .	4.44
New equipment, . . . . .	-
Repairs, . . . . .	1.11
Other expenses, . . . . .	0.10
Excess of Selling Price above Cost of Production, . . . . .	*9.84
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 11.78 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[18 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.54
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.34
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*0.96</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>9.84</b>

\* Equivalent to 1.15 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 31 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 18 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 224 employes (both sexes and all ages), . . . . .	*\$471.94
Number of partners, . . . . .	22
Average investment by each partner, . . . . .	\$26,666
Average net profit to each partner, . . . . .	†\$306
<i>Corporations.</i>	
Average yearly earnings of 162 employes (both sexes and all ages), . . . . .	†\$428.59
Number of stockholders, . . . . .	62
Average investment by each stockholder, . . . . .	\$6,020
Average net profit to each stockholder, . . . . .	‡\$69

\* For 25 private firms.

† For 6 corporations.

‡ Equivalent to 1.15 per cent on average investment.



## Paper and Paper Goods.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	88	\$15,975,662	59.46	72.68
Not making a profit, . . . . .	20	2,735,909	13.51	12.45
Totals, . . . . .	108	\$18,711,571	72.97	85.13
Not answering, . . . . .	40	3,268,074	27.03	14.87
AGGREGATES, . . . . .	148	\$21,979,645	100.00	100.00

*Classified Capital.* [148 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,435,553	6.53
Buildings and fixtures, . . . . .	4,919,589	22.38
Machinery, . . . . .	5,109,239	23.25
Implements and tools, . . . . .	185,711	0.84
Cash capital, . . . . .	6,716,045	30.56
Supplied by partners or stockholders, . . . . .	881,549	4.01
Bills payable, accounts on long time, etc., . . . . .	2,781,959	12.43
TOTAL, . . . . .	\$21,979,645	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$6,355,142	28.91
Machinery, implements, and tools, . . . . .	5,294,950	24.09
Cash capital, . . . . .	6,716,045	30.56
Credit capital, . . . . .	3,613,508	16.44
AGGREGATE, . . . . .	\$21,979,645	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	88	\$14,916,164	59.46	70.28
Not making a profit, . . . . .	20	2,336,862	13.51	11.01
Totals, . . . . .	108	\$17,253,026	72.97	81.29
Not answering, . . . . .	40	3,970,600	27.03	18.71
AGGREGATES, . . . . .	148	\$21,223,626	100.00	100.00

*Cost of Production.* [108 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	68.92
Salaries, . . . . .	2.85
Wages, . . . . .	17.09
Rent, . . . . .	0.50
Taxes, . . . . .	0.99
Insurance, . . . . .	0.58
Freight, . . . . .	5.13
New equipment, . . . . .	0.60
Repairs, . . . . .	2.73
Other expenses, . . . . .	0.01
TOTAL, . . . . .	100.00

**Paper and Paper Goods — Concluded.***Relation of Cost of Production to Selling Price.* [108 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	61.70
Salaries, . . . . .	2.55
Wages, . . . . .	15.84
Rent, . . . . .	0.44
Taxes, . . . . .	0.88
Insurance, . . . . .	0.52
Freight, . . . . .	4.60
New equipment, . . . . .	0.64
Repairs, . . . . .	2.44
Other expenses, . . . . .	0.01
Excess of Selling Price above Cost of Production, . . . . .	*10.48
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 9.66 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[108 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.55
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.61
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*0.32</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>10.48</b>

\* Equivalent to 0.29 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 148 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 108 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 2,903 employes (both sexes and all ages), . . . . .	*\$344.81
Number of partners, . . . . .	116
Average investment by each partner, . . . . .	‡42,985
Average net profit to each partner, . . . . .	‡125
<i>Corporations.</i>	
Average yearly earnings of 6,118 employes (both sexes and all ages), . . . . .	†\$370.23
Number of stockholders, . . . . .	1,072
Average investment by each stockholder, . . . . .	‡12,803
Average net profit to each stockholder, . . . . .	‡38

\* For 90 private firms.

† For 58 corporations.

‡ Equivalent to 0.29 per cent on average investment.

## Photographs and Photographic Materials.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	109	\$352,744	45.23	60.09
Not making a profit, . . . . .	6	10,125	2.49	1.72
Totals, . . . . .	115	\$362,869	47.72	61.81
Not answering, . . . . .	126	224,180	52.28	38.19
AGGREGATES, . . . . .	241	\$587,058	100.00	100.00

*Classified Capital.* [241 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$3,225	0.55
Buildings and fixtures, . . . . .	92,025	15.68
Machinery, . . . . .	23,247	3.96
Implements and tools, . . . . .	185,586	31.61
Cash capital, . . . . .	273,275	46.55
Supplied by partners or stockholders, . . . . .		
Bills payable, accounts on long time, etc., . . . . .	9,700	1.65
TOTAL, . . . . .	\$587,058	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$95,250	16.28
Machinery, implements, and tools, . . . . .	208,833	35.57
Cash capital, . . . . .	273,275	46.55
Credit capital, . . . . .	9,700	1.65
AGGREGATE, . . . . .	\$587,058	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	109	\$546,696	45.23	58.40
Not making a profit, . . . . .	6	14,198	2.49	1.51
Totals, . . . . .	115	\$560,894	47.72	59.91
Not answering, . . . . .	126	375,271	52.28	40.09
AGGREGATES, . . . . .	241	\$936,165	100.00	100.00

*Cost of Production.* [115 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	39.69
Salaries, . . . . .	2.40
Wages, . . . . .	39.61
Rent, . . . . .	14.51
Taxes, . . . . .	1.37
Insurance, . . . . .	0.86
Freight, . . . . .	0.16
New equipment, . . . . .	
Repairs, . . . . .	1.38
Other expenses, . . . . .	0.02
TOTAL, . . . . .	100.00

**Photographs and Photographic Materials — Concluded.***Relation of Cost of Production to Selling Price.* [115 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	25.95
Salaries, . . . . .	1.57
Wages, . . . . .	25.89
Rent, . . . . .	9.48
Taxes, . . . . .	0.90
Insurance, . . . . .	0.56
Freight, . . . . .	0.11
New equipment, . . . . .	-
Repairs, . . . . .	0.90
Other expenses, . . . . .	0.01
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*34.63
TOTAL, . . . . .	100.00

\* Equivalent to 53.53 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[115 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.56
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.30
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*25.77
TOTAL (percentage of selling price above cost of production), . . . . .	34.63

\* Equivalent to 39.84 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 241 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 115 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 564 employes (both sexes and all ages), . . . . .	*\$402.54
Number of partners, . . . . .	125
Average investment by each partner, . . . . .	\$1,849
Average net profit to each partner, . . . . .	†\$737
<i>Corporations.</i>	
Average yearly earnings of 41 employes (both sexes and all ages), . . . . .	†\$500.90
Number of stockholders, . . . . .	13
Average investment by each stockholder, . . . . .	\$10,131
Average net profit to each stockholder, . . . . .	†\$4,035

\* For 239 private firms.

† For 2 corporations.

‡ Equivalent to 39.84 per cent on average investment.

# Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	31	\$992,952	39.74	53.01
Not making a profit, . . . . .	5	73,990	6.41	3.95
Totals, . . . . .	36	\$1,066,942	46.15	56.96
Not answering, . . . . .	42	806,132	53.85	43.04
AGGREGATES, . . . . .	78	\$1,873,074	100.00	100.00

## Classified Capital. [78 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$84,075	4.49
Buildings and fixtures, . . . . .	286,755	15.31
Machinery, . . . . .	144,548	7.72
Implements and tools, . . . . .	50,768	2.71
Cash capital, . . . . .	1,079,025	57.61
Supplied by partners or stockholders, . . . . .	58,090	3.10
Bills payable, accounts on long time, etc., . . . . .	169,813	9.06
TOTAL, . . . . .	\$1,873,074	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$370,830	19.80
Machinery, implements, and tools, . . . . .	195,316	10.43
Cash capital, . . . . .	1,079,025	57.61
Credit capital, . . . . .	227,903	12.16
AGGREGATE, . . . . .	\$1,873,074	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	31	\$1,326,930	39.74	56.36
Not making a profit, . . . . .	5	69,602	6.41	2.95
Totals, . . . . .	36	\$1,396,532	46.15	59.31
Not answering, . . . . .	42	957,981	53.85	40.69
AGGREGATES, . . . . .	78	\$2,354,513	100.00	100.00

## Cost of Production. [36 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	72.44
Salaries, . . . . .	7.20
Wages, . . . . .	14.80
Rent, . . . . .	1.59
Taxes, . . . . .	0.50
Insurance, . . . . .	0.26
Freight, . . . . .	2.55
New equipment, . . . . .	0.22
Repairs, . . . . .	0.34
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.) — Concluded.**

*Relation of Cost of Production to Selling Price.* [36 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	51.87
Salaries, . . . . .	5.15
Wages, . . . . .	10.60
Rent, . . . . .	1.00
Taxes, . . . . .	0.36
Insurance, . . . . .	0.18
Freight, . . . . .	2.04
New equipment, . . . . .	0.16
Repairs, . . . . .	0.24
Other expenses, . . . . .	—
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*28.40
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 37.17 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[36 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.66
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.80
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*19.94</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>28.40</b>

\* Equivalent to 26.09 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 78 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 36 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 405 employes (both sexes and all ages), . . . . .	*\$599.70
Number of partners, . . . . .	45
Average investment by each partner, . . . . .	\$14,622
Average net profit to each partner, . . . . .	‡\$3,815
<i>Corporations.</i>	
Average yearly earnings of 124 employes (both sexes and all ages), . . . . .	†\$541.93
Number of stockholders, . . . . .	86
Average investment by each stockholder, . . . . .	\$4,755
Average net profit to each stockholder, . . . . .	‡\$1,241

\* For 70 private firms.

† For 8 corporations.

‡ Equivalent to 26.09 per cent on average investment.

## Printing, Publishing, and Bookbinding.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	376	\$6,467,772	52.81	61.28
Not making a profit, . . . . .	23	515,770	3.23	4.89
Totals, . . . . .	399	\$6,983,542	56.04	66.17
Not answering, . . . . .	313	3,570,461	43.96	33.83
AGGREGATES, . . . . .	712	\$10,554,003	100.00	100.00

*Classified Capital.* [712 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$333,425	3.16
Buildings and fixtures, . . . . .	702,328	6.65
Machinery, . . . . .	2,846,600	26.97
Implements and tools, . . . . .	2,090,674	19.81
Cash capital, . . . . .	3,066,099	29.05
Supplied by partners or stockholders, . . . . .	64,150	0.61
Bills payable, accounts on long time, etc., . . . . .	1,450,729	13.75
TOTAL, . . . . .	\$10,554,003	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,035,751	9.81
Machinery, implements, and tools, . . . . .	4,937,274	46.78
Cash capital, . . . . .	3,066,099	29.05
Credit capital, . . . . .	1,514,879	14.36
AGGREGATE, . . . . .	\$10,554,003	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	376	\$9,930,865	52.81	60.00
Not making a profit, . . . . .	23	573,582	3.23	3.46
Totals, . . . . .	399	\$10,504,447	56.04	63.46
Not answering, . . . . .	313	6,048,028	43.96	36.54
AGGREGATES, . . . . .	712	\$16,552,475	100.00	100.00

*Cost of Production.* [399 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	38.90
Salaries, . . . . .	10.06
Wages, . . . . .	44.23
Rent, . . . . .	3.82
Taxes, . . . . .	0.67
Insurance, . . . . .	0.51
Freight, . . . . .	0.02
New equipment, . . . . .	0.10
Repairs, . . . . .	0.39
Other expenses, . . . . .	1.30
TOTAL, . . . . .	100.00

**Printing, Publishing, and Bookbinding — Concluded.***Relation of Cost of Production to Selling Price. [399 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	26.38
Salaries, . . . . .	6.82
Wages, . . . . .	29.99
Rent, . . . . .	2.59
Taxes, . . . . .	0.45
Insurance, . . . . .	0.35
Freight, . . . . .	0.01
New equipment, . . . . .	0.07
Repairs, . . . . .	0.26
Other expenses, . . . . .	0.88
Excess of <i>Selling Price</i> above <i>Cost of Production</i> , . . . . .	*32.20
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 48.43 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[399 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.44
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	3.11
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*22.65</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>32.20</b>

\* Equivalent to 34.06 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 712 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 399 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 8,305 employes (both sexes and all ages), . . . . .	*\$417.81
Number of partners, . . . . .	540
Average investment by each partner, . . . . .	\$9,737
Average net profit to each partner, . . . . .	†\$3,317
<i>Corporations.</i>	
Average yearly earnings of 2,179 employes (both sexes and all ages), . . . . .	†\$531.05
Number of stockholders, . . . . .	1,366
Average investment by each stockholder, . . . . .	\$1,263
Average net profit to each stockholder, . . . . .	†\$430

\* For 650 private firms.

† For 62 corporations.

‡ Equivalent to 34.06 per cent on average investment.



## Print Works, Dye Works, and Bleacheries.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	55	\$7,201,355	57.29	44.47
Not making a profit, . . . . .	10	6,563,521	10.42	40.54
Totals, . . . . .	65	\$13,764,876	67.71	85.01
Not answering, . . . . .	31	2,426,534	32.29	14.99
AGGREGATES, . . . . .	96	\$16,191,410	100.00	100.00

*Classified Capital.* [96 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,278,671	7.90
Buildings and fixtures, . . . . .	3,285,400	20.29
Machinery, . . . . .	3,489,864	21.55
Implements and tools, . . . . .	105,177	0.65
Cash capital, . . . . .	3,058,982	18.99
Supplied by partners or stockholders, . . . . .	1,495,283	9.24
Bills payable, accounts on long time, etc., . . . . .	3,478,033	21.48
TOTAL, . . . . .	\$16,191,410	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$4,564,071	28.19
Machinery, implements, and tools, . . . . .	3,595,041	22.20
Cash capital, . . . . .	3,058,982	18.99
Credit capital, . . . . .	4,973,316	30.72
AGGREGATE, . . . . .	\$16,191,410	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	55	\$6,600,808	57.29	42.00
Not making a profit, . . . . .	10	6,281,960	10.42	39.56
Totals, . . . . .	65	\$12,951,768	67.71	81.56
Not answering, . . . . .	31	2,929,075	32.29	18.44
AGGREGATES, . . . . .	96	\$15,880,843	100.00	100.00

*Cost of Production.* [65 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	81.19
Salaries, . . . . .	1.87
Wages, . . . . .	14.84
Rent, . . . . .	0.18
Taxes, . . . . .	0.58
Insurance, . . . . .	0.13
Freight, . . . . .	0.20
New equipment, . . . . .	0.09
Repairs, . . . . .	1.23
Other expenses, . . . . .	0.19
TOTAL, . . . . .	100.00

**Print Works, Dye Works, and Bleacheries — Concluded.***Relation of Cost of Production to Selling Price.* [65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	104.85
Salaries, . . . . .	1.76
Wages, . . . . .	19.07
Rent, . . . . .	0.24
Taxes, . . . . .	0.75
Insurance, . . . . .	0.10
Freight, . . . . .	0.25
New equipment, . . . . .	0.12
Repairs, . . . . .	1.59
Other expenses, . . . . .	0.25
Excess of Cost of Production above Selling Price, . . . . .	*—28.54
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to a loss of 28.85 per cent on amount of capital invested.

*Distribution of Excess of Cost of Production, Interest, Depreciation, etc., above Selling Price.*

[65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	—2.64
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	—2.36
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	—5.00
Excess of Cost of Production above Selling Price, . . . . .	—28.54
<b>Net Loss (percentage of cost of production, interest, depreciation, etc., above selling price), . . . . .</b>	<b>*—38.54</b>

\* Equivalent to a loss of 36.25 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 96 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net loss to each partner or stockholder, are drawn from the 65 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,497 employes (both sexes and all ages), . . . . .	*\$346.25
Number of partners, . . . . .	66
Average investment by each partner, . . . . .	\$14,094
Average net loss to each partner, . . . . .	†\$5,327
<i>Corporations.</i>	
Average yearly earnings of 7,474 employes (both sexes and all ages), . . . . .	†\$315.14
Number of stockholders, . . . . .	1,117
Average investment by each stockholder, . . . . .	\$11,455
Average net loss to each stockholder, . . . . .	†\$4,152

\* For 80 private firms.

† For 16 corporations.

† Equivalent to a loss of 36.25 per cent on average investment.

**NOTE.**— This industry includes both large print works and bleacheries engaged in the bleaching and finishing of textiles and small establishments whose work consists in bleaching and dyeing various articles of clothing. Although the print works, dye works, and bleacheries engaged in the treatment of textiles returned the full capital invested, and stock used (which included all textiles submitted to the various processes), in the majority of cases only the *added value* derived from these processes was entered under "Value of Goods Made and Work Done" and this accounts for the fact that this is the only industry in which the cost of production exceeds the selling price. A full explanation of the peculiar condition of this industry, as indicated by the returns, will be found in those portions of the Analysis which consider "Cost of Production" and "Relation of Cost of Production to Selling Price." The changes are not made in the preceding tables because it was deemed best to present them at first in the exact form in which they were given in the certified returns of the manufacturers.

### Railroad Construction and Equipment.

#### Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	6	\$520,873	40.00	32.59
Not making a profit, . . . . .	4	111,975	26.67	7.00
Totals, . . . . .	10	\$632,848	66.67	39.59
Not answering, . . . . .	5	965,525	33.33	60.41
AGGREGATES, . . . . .	15	\$1,598,373	100.00	100.00

#### Classified Capital. [15 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$402,500	25.18
Buildings and fixtures, . . . . .	399,800	25.01
Machinery, . . . . .	280,673	17.56
Implements and tools, . . . . .	42,500	2.66
Cash capital, . . . . .	273,000	17.08
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	200,000	12.61
TOTAL, . . . . .	\$1,598,373	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$802,300	50.19
Machinery, implements, and tools, . . . . .	323,073	20.22
Cash capital, . . . . .	273,000	17.08
Credit capital, . . . . .	200,000	12.51
AGGREGATE, . . . . .	\$1,598,373	100.00

#### Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	6	\$930,668	40.00	43.12
Not making a profit, . . . . .	4	261,231	26.67	12.11
Totals, . . . . .	10	\$1,191,899	66.67	55.23
Not answering, . . . . .	5	966,325	33.33	44.77
AGGREGATES, . . . . .	15	\$2,158,224	100.00	100.00

#### Cost of Production. [10 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	56.32
Salaries, . . . . .	2.51
Wages, . . . . .	38.40
Rent, . . . . .	0.03
Taxes, . . . . .	0.75
Insurance, . . . . .	0.40
Freight, . . . . .	0.47
New equipment, . . . . .	-
Repairs, . . . . .	2.12
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Railroad Construction and Equipment — Concluded.***Relation of Cost of Production to Selling Price. [10 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	51.33
Salaries, . . . . .	2.33
Wages, . . . . .	35.63
Rent, . . . . .	0.03
Taxes, . . . . .	0.70
Insurance, . . . . .	0.37
Freight, . . . . .	0.44
New equipment, . . . . .	—
Repairs, . . . . .	1.96
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*7.21
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 13.58 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.  
[10 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	0.79
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.07
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*0.86</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>7.21</b>

\* Equivalent to 0.66 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 15 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 10 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 136 employes (both sexes and all ages), . . . . .	*\$301.68
Number of partners, . . . . .	5
Average investment by each partner, . . . . .	\$36,100
Average net profit to each partner, . . . . .	†\$240
<i>Corporations.</i>	
Average yearly earnings of 1,707 employes (both sexes and all ages), . . . . .	†\$507.07
Number of stockholders, . . . . .	482
Average investment by each stockholder, . . . . .	\$938
Average net profit to each stockholder, . . . . .	†\$6

\* For 5 private firms.

† For 10 corporations.

‡ Equivalent to 0.66 per cent on average investment.

**Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	22	\$7,776,782	50.00	69.56
Not making a profit, . . . . .	3	306,160	6.82	2.74
Totals, . . . . .	25	\$8,082,932	56.82	72.30
Not answering, . . . . .	19	3,096,059	43.18	27.70
AGGREGATES, . . . . .	44	\$11,178,991	100.00	100.00

*Classified Capital.* [44 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$432,149	3.87
Buildings and fixtures, . . . . .	1,238,796	11.08
Machinery, . . . . .	1,764,523	15.78
Implements and tools, . . . . .	148,721	1.33
Cash capital, . . . . .	3,589,174	32.11
Supplied by partners or stockholders, . . . . .	3,083,879	27.59
Bills payable, accounts on long time, etc., . . . . .	921,749	8.24
TOTAL, . . . . .	\$11,178,991	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,670,945	14.95
Machinery, implements, and tools, . . . . .	1,913,244	17.11
Cash capital, . . . . .	3,589,174	32.11
Credit capital, . . . . .	4,005,628	35.83
AGGREGATE, . . . . .	\$11,178,991	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	22	\$9,010,817	50.00	67.10
Not making a profit, . . . . .	3	552,328	6.82	4.11
Totals, . . . . .	25	\$9,563,145	56.82	71.21
Not answering, . . . . .	19	3,866,076	43.18	28.79
AGGREGATES, . . . . .	44	\$13,429,221	100.00	100.00

*Cost of Production.* [25 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	76.03
Salaries, . . . . .	1.75
Wages, . . . . .	20.55
Rent, . . . . .	0.38
Taxes, . . . . .	0.41
Insurance, . . . . .	0.36
Freight, . . . . .	0.13
New equipment, . . . . .	-
Repairs, . . . . .	0.39
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

# Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.) — Concluded.

*Relation of Cost of Production to Selling Price.* [25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	61.75
Salaries, . . . . .	1.42
Wages, . . . . .	16.69
Rent, . . . . .	0.31
Taxes, . . . . .	0.34
Insurance, . . . . .	0.29
Freight, . . . . .	0.11
New equipment, . . . . .	-
Repairs, . . . . .	0.31
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*18.78
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 22.22 per cent on amount of capital invested.

## *Distribution of Excess of Selling Price above Cost of Production.* [25 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.87
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.45
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*9.46</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>18.78</b>

\* Equivalent to 11.20 per cent on amount of capital invested.

## *Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 44 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 25 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,288 employes (both sexes and all ages), . . . . .	*\$309.97
Number of partners, . . . . .	23
Average investment by each partner, . . . . .	\$47,839
Average net profit to each partner, . . . . .	‡\$5,356
<i>Corporations.</i>	
Average yearly earnings of 5,353 employes (both sexes and all ages), . . . . .	†\$356.83
Number of stockholders, . . . . .	190
Average investment by each stockholder, . . . . .	\$36,751
Average net profit to each stockholder, . . . . .	‡\$4,116

\* For 25 private firms.

† For 19 corporations.

‡ Equivalent to 11.20 per cent on average investment.

## Scientific Instruments and Appliances.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	30	\$559,214	46.15	69.23
Not making a profit, . . . . .	2	44,600	3.08	5.52
Totals, . . . . .	32	\$603,814	49.23	74.75
Not answering, . . . . .	33	203,931	50.77	25.25
AGGREGATES, . . . . .	65	\$807,745	100.00	100.00

*Classified Capital.* [65 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$23,900	2.96
Buildings and fixtures, . . . . .	71,617	8.87
Machinery, . . . . .	126,957	15.72
Implements and tools, . . . . .	55,015	6.81
Cash capital, . . . . .	471,606	58.38
Supplied by partners or stockholders, . . . . .	20,000	2.48
Bills payable, accounts on long time, etc., . . . . .	38,650	4.78
TOTAL, . . . . .	\$807,745	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$95,517	11.83
Machinery, implements, and tools, . . . . .	181,972	22.53
Cash capital, . . . . .	471,606	58.38
Credit capital, . . . . .	58,650	7.26
AGGREGATE, . . . . .	\$807,745	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	30	\$824,858	46.15	67.19
Not making a profit, . . . . .	2	2,750	3.08	0.22
Totals, . . . . .	32	\$827,608	49.23	67.41
Not answering, . . . . .	33	400,075	50.77	32.59
AGGREGATES, . . . . .	65	\$1,227,683	100.00	100.00

*Cost of Production.* [32 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	53.92
Salaries, . . . . .	5.87
Wages, . . . . .	34.81
Rent, . . . . .	1.63
Taxes, . . . . .	0.69
Insurance, . . . . .	0.22
Freight, . . . . .	0.11
New equipment, . . . . .	2.47
Repairs, . . . . .	0.38
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Scientific Instruments and Appliances — Concluded.***Relation of Cost of Production to Selling Price.* [32 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	44.22
Salaries, . . . . .	4.82
Wages, . . . . .	28.54
Rent, . . . . .	1.33
Taxes, . . . . .	0.48
Insurance, . . . . .	0.18
Freight, . . . . .	0.10
New equipment, . . . . .	2.02
Repairs, . . . . .	0.31
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*18.00
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 24.67 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[32 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.40
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.64
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*8.96</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>18.00</b>

\* Equivalent to 12.29 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 65 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 32 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 875 employes (both sexes and all ages), . . . . .	*\$390.57
Number of partners, . . . . .	40
Average investment by each partner, . . . . .	\$4,962
Average net profit to each partner, . . . . .	†\$610
<i>Corporations.</i>	
Average yearly earnings of 404 employes (both sexes and all ages), . . . . .	†\$416.10
Number of stockholders, . . . . .	42
Average investment by each stockholder, . . . . .	\$9,651
Average net profit to each stockholder, . . . . .	†\$1,186

\* For 60 private firms.

† For 5 corporations.

‡ Equivalent to 12.29 per cent on average investment.



## Shipbuilding (including Awnings, Tents, and Decorations).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	117	\$341,430	39.93	29.69
Not making a profit, . . . . .	8	22,960	2.73	1.99
Totals, . . . . .	125	\$364,390	42.66	31.68
Not answering, . . . . .	168	785,720	67.34	68.32
AGGREGATES, . . . . .	293	\$1,150,100	100.00	100.00

## Classified Capital. [293 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$151,047	13.18
Buildings and fixtures, . . . . .	142,099	12.36
Machinery, . . . . .	100,415	8.73
Implements and tools, . . . . .	90,291	7.85
Cash capital, . . . . .	599,348	52.11
Supplied by partners or stockholders, . . . . .	15,200	1.32
Bills payable, accounts on long time, etc., . . . . .	51,700	4.50
TOTAL, . . . . .	\$1,150,100	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$293,146	25.49
Machinery, implements, and tools, . . . . .	190,706	16.68
Cash capital, . . . . .	599,348	52.11
Credit capital, . . . . .	66,900	5.82
AGGREGATE, . . . . .	\$1,150,100	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	117	\$863,990	39.93	38.98
Not making a profit, . . . . .	8	33,941	2.73	1.53
Totals, . . . . .	125	\$897,931	42.66	40.51
Not answering, . . . . .	168	1,318,634	67.34	59.49
AGGREGATES, . . . . .	293	\$2,216,565	100.00	100.00

## Cost of Production. [125 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	57.06
Salaries, . . . . .	0.14
Wages, . . . . .	38.55
Rent, . . . . .	3.10
Taxes, . . . . .	0.38
Insurance, . . . . .	0.44
Freight, . . . . .	0.01
New equipment, . . . . .	-
Repairs, . . . . .	0.32
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Shipbuilding (including Awnings, Tents, and Decorations)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [125 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	42.27
Salaries, . . . . .	0.10
Wages, . . . . .	28.56
Rent, . . . . .	2.29
Taxes, . . . . .	0.28
Insurance, . . . . .	0.33
Freight, . . . . .	0.01
New equipment, . . . . .	—
Repairs, . . . . .	0.24
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*25.92
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 63.83 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[125 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.18
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.67
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*19.07</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>25.92</b>

\* Equivalent to 47.00 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 293 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 125 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 2,701 employes (both sexes and all ages), . . . . .	*\$238.47
Number of partners, . . . . .	165
Average investment by each partner, . . . . .	‡2,208
Average net profit to each partner, . . . . .	‡\$1,038
<i>Corporations.</i>	
Average yearly earnings of 80 employes (both sexes and all ages), . . . . .	†\$500.00
Number of stockholders, . . . . .	—
Average investment by each stockholder, . . . . .	—
Average net profit to each stockholder, . . . . .	—

\* For 292 private firms.

† For 1 corporation.

‡ Equivalent to 47.00 per cent on average investment.

## Silk and Silk Goods (including Buttons and Dress Trimmings).

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	14	\$1,603,636	50.00	60.61
Not making a profit, . . . . .	2	143,590	7.14	5.43
Totals, . . . . .	16	\$1,747,226	57.14	66.04
Not answering, . . . . .	12	898,602	42.86	33.96
AGGREGATES, . . . . .	28	\$2,645,828	100.00	100.00

## Classified Capital. [28 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentage
Land, . . . . .	\$118,366	4.47
Buildings and fixtures, . . . . .	357,861	13.53
Machinery, . . . . .	443,019	16.74
Implements and tools, . . . . .	21,875	0.83
Cash capital, . . . . .	990,373	36.64
Supplied by partners or stockholders, . . . . .	71,100	2.69
Bills payable, accounts on long time, etc., . . . . .	664,214	25.10
TOTAL, . . . . .	\$2,645,828	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$476,247	18.00
Machinery, implements, and tools, . . . . .	464,894	17.57
Cash capital, . . . . .	990,373	36.64
Credit capital, . . . . .	735,314	27.79
AGGREGATE, . . . . .	\$2,645,828	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	14	\$2,350,269	50.00	82.08
Not making a profit, . . . . .	2	343,431	7.14	7.80
Totals, . . . . .	16	\$2,693,700	57.14	59.63
Not answering, . . . . .	12	1,823,693	42.86	40.37
AGGREGATES, . . . . .	28	\$4,517,393	100.00	100.00

## Cost of Production. [16 Establishments.]

CLASSIFICATION.	Percentages of Cost of Product
Stock used, . . . . .	67.59
Salaries, . . . . .	2.75
Wages, . . . . .	27.18
Rent, . . . . .	0.27
Taxes, . . . . .	0.23
Insurance, . . . . .	0.13
Freight, . . . . .	1.02
New equipment, . . . . .	-
Repairs, . . . . .	0.80
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Silk and Silk Goods (including Buttons and Dress Trimmings)**  
— Concluded.

*Relation of Cost of Production to Selling Price.* [16 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	55.85
Salaries, . . . . .	2.34
Wages, . . . . .	22.86
Rent, . . . . .	0.23
Taxes, . . . . .	0.19
Insurance, . . . . .	0.11
Freight, . . . . .	0.86
New equipment, . . . . .	—
Repairs, . . . . .	0.67
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*15.89
TOTAL, . . . . .	100.00

\* Equivalent to 24.50 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[16 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.09
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.14
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*7.66
TOTAL (percentage of selling price above cost of production), . . . . .	15.89

\* Equivalent to 11.81 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 28 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 16 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 854 employes (both sexes and all ages), . . . . .	*\$300.76
Number of partners, . . . . .	17
Average investment by each partner, . . . . .	‡24,074
Average net profit to each partner, . . . . .	‡2,843
<i>Corporations.</i>	
Average yearly earnings of 2,460 employes (both sexes and all ages), . . . . .	†\$267.13
Number of stockholders, . . . . .	132
Average investment by each stockholder, . . . . .	\$10,136
Average net profit to each stockholder, . . . . .	‡\$1,197

\* For 16 private firms.

† For 12 corporations.

‡ Equivalent to 11.81 per cent on average investment.

## Sporting and Athletic Goods.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	12	\$103,280	44.45	27.47
Not making a profit, . . . . .	1	3,100	3.70	0.82
Totals, . . . . .	13	\$106,380	48.15	28.29
Not answering, . . . . .	14	260,632	51.85	71.71
AGGREGATES, . . . . .	27	\$376,012	100.00	100.00

## Classified Capital. [27 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$29,300	7.79
Buildings and fixtures, . . . . .	51,400	13.67
Machinery, . . . . .	59,728	15.89
Implements and tools, . . . . .	21,435	5.70
Cash capital, . . . . .	170,849	45.44
Supplied by partners or stockholders, . . . . .	10,500	2.79
Bills payable, accounts on long time, etc., . . . . .	32,900	8.72
TOTAL, . . . . .	\$376,012	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$80,700	21.46
Machinery, implements, and tools, . . . . .	81,163	21.59
Cash capital, . . . . .	170,849	45.44
Credit capital, . . . . .	43,300	11.51
AGGREGATE, . . . . .	\$376,012	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	12	\$170,680	44.45	15.80
Not making a profit, . . . . .	1	6,000	3.70	0.56
Totals, . . . . .	13	\$176,680	48.15	16.36
Not answering, . . . . .	14	903,286	51.85	83.64
AGGREGATES, . . . . .	27	\$1,079,966	100.00	100.00

## Cost of Production. [13 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	58.97
Salaries, . . . . .	2.09
Wages, . . . . .	31.55
Rent, . . . . .	3.07
Taxes, . . . . .	0.32
Insurance, . . . . .	2.79
Freight, . . . . .	0.95
New equipment, . . . . .	-
Repairs, . . . . .	0.26
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Sporting and Athletic Goods — Concluded.***Relation of Cost of Production to Selling Price.* [13 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	45.44
Salaries, . . . . .	1.61
Wages, . . . . .	24.31
Rent, . . . . .	2.37
Taxes, . . . . .	0.25
Insurance, . . . . .	2.15
Freight, . . . . .	0.73
New equipment, . . . . .	-
Repairs, . . . . .	0.30
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*23.94
TOTAL, . . . . .	100.00

\* Equivalent to 38.10 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[13 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.72
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.30
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*14.92
TOTAL (percentage of selling price above cost of production), . . . . .	22.94

\* Equivalent to 24.79 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employ  s are drawn from the returns of 27 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 13 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 812 employ��s (both sexes and all ages), . . . . .	*\$257.37
Number of partners, . . . . .	17
Average investment by each partner, . . . . .	\$4,143
Average net profit to each partner, . . . . .	†\$1,027
<i>Corporations.</i>	
Average yearly earnings of 51 employ��s (both sexes and all ages), . . . . .	†\$320.67
Number of stockholders, . . . . .	41
Average investment by each stockholder, . . . . .	\$877
Average net profit to each stockholder, . . . . .	†\$217

\* For 25 private firms.

† For 2 corporations.

‡ Equivalent to 24.79 per cent on average investment.

## Stone.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	184	\$2,500,588	48.68	65.01
Not making a profit, . . . . .	9	212,516	2.38	5.53
Totals, . . . . .	193	\$2,713,104	51.06	70.54
Not answering, . . . . .	185	1,133,126	48.94	29.46
AGGREGATES, . . . . .	378	\$3,846,230	100.00	100.00

*Classified Capital.* [378 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,012,124	26.32
Buildings and fixtures, . . . . .	574,677	14.94
Machinery, . . . . .	398,729	10.37
Implements and tools, . . . . .	236,366	6.14
Cash capital, . . . . .	1,404,922	36.53
Supplied by partners or stockholders, . . . . .	47,414	1.23
Bills payable, accounts on long time, etc., . . . . .	172,096	4.47
TOTAL, . . . . .	\$3,846,230	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$1,586,801	41.26
Machinery, implements, and tools, . . . . .	634,995	16.51
Cash capital, . . . . .	1,404,922	36.53
Debit capital, . . . . .	219,512	5.70
AGGREGATE, . . . . .	\$3,846,230	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	184	\$3,831,510	48.68	69.56
Not making a profit, . . . . .	9	244,723	2.38	4.44
Totals, . . . . .	193	\$4,076,233	51.06	74.00
Not answering, . . . . .	185	1,432,336	48.94	26.00
AGGREGATES, . . . . .	378	\$5,508,569	100.00	100.00

*Cost of Production.* [193 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	32.44
Salaries, . . . . .	2.36
Wages, . . . . .	58.64
Rent, . . . . .	0.79
Taxes, . . . . .	0.64
Insurance, . . . . .	0.22
Freight, . . . . .	4.27
New equipment, . . . . .	0.06
Repairs, . . . . .	0.26
Other expenses, . . . . .	0.33
TOTAL, . . . . .	100.00

## Stone — Concluded.

*Relation of Cost of Production to Selling Price.* [193 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	25.66
Salaries, . . . . .	1.87
Wages, . . . . .	46.31
Rent, . . . . .	0.62
Taxes, . . . . .	0.61
Insurance, . . . . .	0.25
Freight, . . . . .	3.38
New equipment, . . . . .	0.05
Repairs, . . . . .	0.20
Other expenses, . . . . .	0.26
Excess of Selling Price above Cost of Production, . . . . .	*20.89
TOTAL, . . . . .	100.00

\* Equivalent to 31.38 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[193 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.41
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.10
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*13.38
TOTAL (percentage of selling price above cost of production), . . . . .	20.89

\* Equivalent to 20.11 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 378 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 193 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 5,507 employes (both sexes and all ages), . . . . .	*\$389.47
Number of partners, . . . . .	285
Average investment by each partner, . . . . .	\$7,093
Average net profit to each partner, . . . . .	†\$1,426
<i>Corporations.</i>	
Average yearly earnings of 1,294 employes (both sexes and all ages), . . . . .	†\$430.16
Number of stockholders, . . . . .	273
Average investment by each stockholder, . . . . .	\$2,534
Average net profit to each stockholder, . . . . .	†\$500

\* For 366 private firms.

† For 12 corporations.

‡ Equivalent to 20.11 per cent on average investment.



## Straw and Palm Leaf Goods.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	16	\$1,571,764	34.04	62.87
Not making a profit, . . . . .	8	491,425	6.38	16.37
Totals, . . . . .	19	\$2,063,189	40.42	68.74
Not answering, . . . . .	28	938,238	59.58	31.26
AGGREGATES, . . . . .	47	\$3,001,427	100.00	100.00

*Classified Capital.* [47 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$89,725	2.99
Buildings and fixtures, . . . . .	484,105	16.13
Machinery, . . . . .	464,235	15.47
Implements and tools, . . . . .	62,008	2.07
Cash capital, . . . . .	1,041,902	34.71
Supplied by partners or stockholders, . . . . .	95,000	3.16
Bills payable, accounts on long time, etc., . . . . .	704,452	23.47
TOTAL, . . . . .	\$3,001,427	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$573,830	19.12
Machinery, implements, and tools, . . . . .	526,243	17.54
Cash capital, . . . . .	1,041,902	34.71
Credit capital, . . . . .	859,452	28.63
AGGREGATE, . . . . .	\$3,001,427	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	16	\$3,301,775	34.04	62.70
Not making a profit, . . . . .	8	450,178	6.38	7.18
Totals, . . . . .	19	\$3,751,953	40.42	59.88
Not answering, . . . . .	28	2,513,334	59.58	40.12
AGGREGATES, . . . . .	47	\$6,265,287	100.00	100.00

*Cost of Production.* [19 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	65.37
Salaries, . . . . .	3.68
Wages, . . . . .	27.21
Rent, . . . . .	0.45
Taxes, . . . . .	0.26
Insurance, . . . . .	0.44
Freight, . . . . .	1.63
New equipment, . . . . .	0.04
Repairs, . . . . .	0.56
Other expenses, . . . . .	0.46
TOTAL, . . . . .	100.00

**Straw and Palm Leaf Goods — Concluded.***Relation of Cost of Production to Selling Price. [19 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	56.79
Salaries, . . . . .	3.20
Wages, . . . . .	23.64
Rent, . . . . .	0.40
Taxes, . . . . .	0.23
Insurance, . . . . .	0.38
Freight, . . . . .	1.33
New equipment, . . . . .	0.03
Repairs, . . . . .	0.48
Other expenses, . . . . .	0.40
Excess of Selling Price above Cost of Production, . . . . .	*13.12
TOTAL, . . . . .	100.00

\* Equivalent to 23.86 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.  
[19 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.74
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.97
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*5.41
TOTAL (percentage of selling price above cost of production), . . . . .	13.12

\* Equivalent to 9.85 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 47 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 19 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 5,768 employes (both sexes and all ages), . . . . .	*\$212.08
Number of partners, . . . . .	37
Average investment by each partner, . . . . .	\$40,642
Average net profit to each partner, . . . . .	†\$4,008
<i>Corporations.</i>	
Average yearly earnings of 729 employes (both sexes and all ages), . . . . .	†\$201.88
Number of stockholders, . . . . .	21
Average investment by each stockholder, . . . . .	\$26,640
Average net profit to each stockholder, . . . . .	†\$2,623

\* For 45 private firms.

† For 2 corporations.

‡ Equivalent to 9.85 per cent on average investment.

## Tallow, Candles, Soap, and Grease.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	64	\$1,015,490	41.29	64.71
Not making a profit, . . . . .	9	26,772	5.81	1.71
Totals, . . . . .	73	\$1,042,262	47.10	66.42
Not answering, . . . . .	82	528,936	52.90	33.58
AGGREGATES, . . . . .	155	\$1,569,198	100.00	100.00

## Classified Capital. [155 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$154,838	9.87
Buildings and fixtures, . . . . .	359,245	22.89
Machinery, . . . . .	124,680	7.95
Implements and tools, . . . . .	45,404	2.89
Cash capital, . . . . .	607,498	38.71
Supplied by partners or stockholders, . . . . .	116,200	7.41
Bills payable, accounts on long time, etc., . . . . .	161,333	10.28
TOTAL, . . . . .	\$1,569,198	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$514,083	32.76
Machinery, implements, and tools, . . . . .	170,084	10.84
Cash capital, . . . . .	607,498	38.71
Credit capital, . . . . .	277,533	17.69
AGGREGATE, . . . . .	\$1,569,198	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	64	\$2,250,061	41.29	64.78
Not making a profit, . . . . .	9	22,544	5.81	0.65
Totals, . . . . .	73	\$2,273,505	47.10	65.43
Not answering, . . . . .	82	1,201,385	52.90	34.57
AGGREGATES, . . . . .	155	\$3,474,890	100.00	100.00

## Cost of Production. [73 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	85.40
Salaries, . . . . .	1.25
Wages, . . . . .	10.50
Rent, . . . . .	0.48
Taxes, . . . . .	0.37
Insurance, . . . . .	0.34
Freight, . . . . .	1.11
New equipment, . . . . .	-
Repairs, . . . . .	0.46
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Tallow, Candles, Soap, and Grease — Concluded.***Relation of Cost of Production to Selling Price. [73 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	72.70
Salaries, . . . . .	1.06
Wages, . . . . .	9.02
Rent, . . . . .	0.41
Taxes, . . . . .	0.32
Insurance, . . . . .	0.28
Freight, . . . . .	0.94
New equipment, . . . . .	—
Repairs, . . . . .	0.89
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*14.88
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 32.45 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.  
[73 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.29
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.50
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*8.09</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>14.88</b>

\* Equivalent to 17.64 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 155 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 73 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 668 employes (both sexes and all ages), . . . . .	*\$420.21
Number of partners, . . . . .	99
Average investment by each partner, . . . . .	\$8,383
Average net profit to each partner, . . . . .	†\$1,479
<i>Corporations.</i>	
Average yearly earnings of 86 employes (both sexes and all ages), . . . . .	†\$575.58
Number of stockholders, . . . . .	13
Average investment by each stockholder, . . . . .	\$16,331
Average net profit to each stockholder, . . . . .	†\$2,881

\* For 182 private firms.

† For 3 corporations.

‡ Equivalent to 17.64 per cent on average investment.

## Tobacco, Snuff, and Cigars.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	111	\$663,560	36.76	61.22
Not making a profit, . . . . .	13	90,975	4.30	8.39
Totals, . . . . .	124	\$754,535	41.06	69.61
Not answering, . . . . .	178	329,383	58.94	30.39
AGGREGATES, . . . . .	302	\$1,083,908	100.00	100.00

*Classified Capital.* [302 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$13,150	1.21
Buildings and fixtures, . . . . .	76,580	7.07
Machinery, . . . . .	20,039	1.85
Implements and tools, . . . . .	39,414	3.64
Cash capital, . . . . .	732,089	67.54
Supplied by partners or stockholders, . . . . .	50,100	4.62
Bills payable, accounts on long time, etc., . . . . .	162,536	14.07
TOTAL, . . . . .	\$1,083,908	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$89,730	8.28
Machinery, implements, and tools, . . . . .	59,453	5.49
Cash capital, . . . . .	732,089	67.54
Credit capital, . . . . .	202,636	18.69
AGGREGATE, . . . . .	\$1,083,908	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	111	\$1,670,173	36.76	59.37
Not making a profit, . . . . .	13	231,206	4.30	8.22
Totals, . . . . .	124	\$1,901,379	41.06	67.59
Not answering, . . . . .	178	911,705	58.94	32.41
AGGREGATES, . . . . .	302	\$2,813,084	100.00	100.00

*Cost of Production.* [124 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	56.77
Salaries, . . . . .	4.61
Wages, . . . . .	25.57
Rent, . . . . .	1.97
Taxes, . . . . .	0.26
Insurance, . . . . .	0.28
Freight, . . . . .	0.34
New equipment, . . . . .	-
Repairs, . . . . .	0.20
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Tobacco, Snuff, and Cigars — Concluded.***Relation of Cost of Production to Selling Price.* [124 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	49.06
Salaries, . . . . .	3.99
Wages, . . . . .	30.75
Rent, . . . . .	1.71
Taxes, . . . . .	0.23
Insurance, . . . . .	0.24
Freight, . . . . .	0.29
New equipment, . . . . .	—
Repairs, . . . . .	0.17
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*13.57
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 34.19 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[124 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.71
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.22
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*6.64</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>13.57</b>

\* Equivalent to 16.73 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 302 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 124 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,896 employes (both sexes and all ages), . . . . .	*\$395.78
Number of partners, . . . . .	157
Average investment by each partner, . . . . .	‡\$3,430
Average net profit to each partner, . . . . .	‡\$574
<i>Corporations.</i>	
Average yearly earnings of 306 employes (both sexes and all ages), . . . . .	†\$359.96
Number of stockholders, . . . . .	31
Average investment by each stockholder, . . . . .	\$6,967
Average net profit to each stockholder, . . . . .	‡\$1,166

\* For 298 private firms.

† For 4 corporations.

‡ Equivalent to 16.73 per cent on average investment.

## Toys and Games (Children's).

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	10	\$266,235	66.67	89.95
Not making a profit, . . . . .	1	26,000	6.66	8.78
Totals, . . . . .	11	\$292,235	73.33	98.73
Not answering, . . . . .	4	3,750	26.67	1.27
AGGREGATES, . . . . .	15	\$295,985	100.00	100.00

*Classified Capital.* [15 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$11,975	4.05
Buildings and fixtures, . . . . .	55,650	18.80
Machinery, . . . . .	45,600	15.37
Implements and tools, . . . . .	6,450	2.18
Cash capital, . . . . .	128,840	43.53
Supplied by partners or stockholders, . . . . .	8,000	2.70
Bills payable, accounts on long time, etc., . . . . .	89,570	30.37
TOTAL, . . . . .	\$295,985	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$67,625	22.85
Machinery, implements, and tools, . . . . .	51,950	17.55
Cash capital, . . . . .	128,840	43.53
Credit capital, . . . . .	47,570	16.07
AGGREGATE, . . . . .	\$295,985	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	10	\$276,407	66.67	87.22
Not making a profit, . . . . .	1	35,000	6.66	11.05
Totals, . . . . .	11	\$311,407	73.33	98.27
Not answering, . . . . .	4	5,438	26.67	1.73
AGGREGATES, . . . . .	15	\$316,895	100.00	100.00

*Cost of Production.* [11 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	43.48
Salaries, . . . . .	4.83
Wages, . . . . .	45.07
Rent, . . . . .	1.63
Taxes, . . . . .	0.64
Insurance, . . . . .	0.30
Freight, . . . . .	2.95
New equipment, . . . . .	-
Repairs, . . . . .	1.10
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Toys and Games (Children's) — Concluded.***Relation of Cost of Production to Selling Price. [11 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	36.43
Salaries, . . . . .	4.05
Wages, . . . . .	37.76
Rent, . . . . .	1.37
Taxes, . . . . .	0.53
Insurance, . . . . .	0.25
Freight, . . . . .	2.48
New equipment, . . . . .	-
Repairs, . . . . .	0.92
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*16.21
TOTAL, . . . . .	100.00

\* Equivalent to 17.28 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.  
[11 Establishments.]*

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.79
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.65
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*6.77
TOTAL (percentage of selling price above cost of production), . . . . .	16.21

\* Equivalent to 7.21 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 15 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 11 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 200 employes (both sexes and all ages), . . . . .	*\$314.26
Number of partners, . . . . .	14
Average investment by each partner, . . . . .	†\$11,805
Average net profit to each partner, . . . . .	‡\$352
<i>Corporations.</i>	
Average yearly earnings of 145 employes (both sexes and all ages), . . . . .	†\$386.03
Number of stockholders, . . . . .	11
Average investment by each stockholder, . . . . .	\$11,542
Average net profit to each stockholder, . . . . .	‡\$332

\* For 13 private firms.

† For 2 corporations.

‡ Equivalent to 7.21 per cent on average investment.



## Trunks and Valises.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab-lishments	Amount of Capital In-vested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	11	\$62,160	44.00	48.32
Not making a profit, . . . . .	1	2,000	4.00	1.56
Totals, . . . . .	12	\$64,160	48.00	49.88
Not answering, . . . . .	13	64,470	52.00	50.12
AGGREGATES, . . . . .	25	\$128,630	100.00	100.00

*Classified Capital. [25 Establishments.]*

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	-	-
Buildings and fixtures, . . . . .	\$6,300	4.90
Machinery, . . . . .	6,410	4.98
Implements and tools, . . . . .	3,075	2.86
Cash capital, . . . . .	99,045	77.00
Supplied by partners or stockholders, . . . . .	-	-
Bills payable, accounts on long time, etc., . . . . .	13,200	10.26
TOTAL, . . . . .	\$128,630	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$6,300	4.90
Machinery, implements, and tools, . . . . .	10,085	7.84
Cash capital, . . . . .	99,045	77.00
Credit capital, . . . . .	13,200	10.26
AGGREGATE, . . . . .	\$128,630	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab-lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	11	\$152,525	44.00	43.99
Not making a profit, . . . . .	1	8,630	4.00	2.46
Totals, . . . . .	12	\$161,055	48.00	46.45
Not answering, . . . . .	13	185,665	52.00	53.55
AGGREGATES, . . . . .	25	\$346,720	100.00	100.00

*Cost of Production. [12 Establishments.]*

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	65.37
Salaries, . . . . .	0.33
Wages, . . . . .	27.55
Rent, . . . . .	4.45
Taxes, . . . . .	0.17
Insurance, . . . . .	0.75
Freight, . . . . .	0.87
New equipment, . . . . .	-
Repairs, . . . . .	0.51
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Trunks and Valises — Concluded.***Relation of Cost of Production to Selling Price.* [12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	51.66
Salaries, . . . . .	0.26
Wages, . . . . .	21.78
Rent, . . . . .	3.52
Taxes, . . . . .	0.13
Insurance, . . . . .	0.80
Freight, . . . . .	0.68
New equipment, . . . . .	-
Repairs, . . . . .	0.41
Other expenses, . . . . .	-
Excess of Selling Price above Cost of Production, . . . . .	*20.96
TOTAL, . . . . .	100.00

\* Equivalent to 52.62 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[12 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.74
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	0.31
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*13.91
TOTAL (percentage of selling price above cost of production), . . . . .	20.96

\* Equivalent to 34.93 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 25 establishments, the number of private firms being shown in the foot-note. The figures relating to the number of partners, the average investment by each partner, and the average net profit to each partner, are drawn from the 12 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 229 employes (both sexes and all ages), . . . . .	*\$344.38
Number of partners, . . . . .	18
Average investment by each partner, . . . . .	\$3,564
Average net profit to each partner, . . . . .	†\$1,245

\* For 25 private firms.

† Equivalent to 34.93 per cent on average investment.

## Whips, Lashes, and Stocks.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	25	\$575,568	41.67	62.59
Not making a profit, . . . . .	1	2,000	1.66	0.22
Totals, . . . . .	26	\$577,568	43.33	62.81
Not answering, . . . . .	34	342,022	56.67	37.19
AGGREGATES, . . . . .	60	\$919,590	100.00	100.00

*Classified Capital.* [60 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$31,250	3.40
Buildings and fixtures, . . . . .	49,932	5.43
Machinery, . . . . .	144,015	15.66
Implements and tools, . . . . .	7,955	0.87
Cash capital, . . . . .	512,518	55.73
Supplied by partners or stockholders, . . . . .	108,400	11.79
Bills payable, accounts on long time, etc., . . . . .	65,520	7.12
TOTAL, . . . . .	\$919,590	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$81,182	8.83
Machinery, implements, and tools, . . . . .	151,970	16.53
Cash capital, . . . . .	512,518	55.73
Credit capital, . . . . .	173,920	18.91
AGGREGATE, . . . . .	\$919,590	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	25	\$591,522	41.67	56.21
Not making a profit, . . . . .	1	100	1.66	0.01
Totals, . . . . .	26	\$591,622	43.33	56.22
Not answering, . . . . .	34	460,779	56.67	43.78
AGGREGATES, . . . . .	60	\$1,052,401	100.00	100.00

*Cost of Production.* [26 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	54.49
Salaries, . . . . .	9.21
Wages, . . . . .	31.14
Rent, . . . . .	2.11
Taxes, . . . . .	1.41
Insurance, . . . . .	0.76
Freight, . . . . .	0.64
New equipment, . . . . .	
Repairs, . . . . .	0.34
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Whips, Lashes, and Stocks — Concluded.***Relation of Cost of Production to Selling Price.* [26 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	31.87
Salaries, . . . . .	5.39
Wages, . . . . .	18.21
Rent, . . . . .	1.23
Taxes, . . . . .	0.82
Insurance, . . . . .	0.45
Freight, . . . . .	0.32
New equipment, . . . . .	—
Repairs, . . . . .	0.20
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*41.51
TOTAL, . . . . .	100.00

\* Equivalent to 42.52 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[26 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	3.65
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.61
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	*31.25
TOTAL (percentage of selling price above cost of production), . . . . .	41.51

\* Equivalent to 32.01 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employ  s are drawn from the returns of 60 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 26 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 432 employ��s (both sexes and all ages), . . . . .	*\$329.34
Number of partners, . . . . .	35
Average investment by each partner, . . . . .	\$4,551
Average net profit to each partner, . . . . .	†\$1,457
<i>Corporations.</i>	
Average yearly earnings of 134 employ��s (both sexes and all ages), . . . . .	†\$478.54
Number of stockholders, . . . . .	65
Average investment by each stockholder, . . . . .	\$6,435
Average net profit to each stockholder, . . . . .	†\$2,000

\* For 56 private firms.

† For 4 corporations.

‡ Equivalent to 32.01 per cent on average investment.

## Wooden Goods (including Corks, Bungs, and Taps).

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	240	\$2,032,198	44.61	60.83
Not making a profit, . . . . .	20	230,066	3.72	6.89
Totals, . . . . .	260	\$2,262,263	48.33	67.72
Not answering, . . . . .	278	1,078,486	51.67	32.28
AGGREGATES, . . . . .	538	\$3,340,748	100.00	100.00

*Classified Capital.* [538 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$361,074	10.81
Buildings and fixtures, . . . . .	507,849	15.20
Machinery, . . . . .	583,967	17.48
Implements and tools, . . . . .	139,427	4.17
Cash capital, . . . . .	1,376,736	41.21
Supplied by partners or stockholders, . . . . .	17,450	0.52
Bills payable, accounts on long time, etc., . . . . .	354,245	10.61
TOTAL, . . . . .	\$3,340,748	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$868,923	26.01
Machinery, implements, and tools, . . . . .	723,394	21.66
Cash capital, . . . . .	1,376,736	41.21
Credit capital, . . . . .	371,695	11.13
AGGREGATE, . . . . .	\$3,340,748	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	240	\$2,992,698	44.61	60.93
Not making a profit, . . . . .	20	168,073	3.72	3.42
Totals, . . . . .	260	\$3,160,771	48.33	64.35
Not answering, . . . . .	278	1,750,955	51.67	35.65
AGGREGATES, . . . . .	538	\$4,911,726	100.00	100.00

*Cost of Production.* [260 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	51.95
Salaries, . . . . .	2.17
Wages, . . . . .	37.80
Rent, . . . . .	2.94
Taxes, . . . . .	0.63
Insurance, . . . . .	0.70
Freight, . . . . .	3.28
New equipment, . . . . .	0.01
Repairs, . . . . .	0.64
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

**Wooden Goods (including Corks, Bungs, and Taps) — Concluded.***Relation of Cost of Production to Selling Price.* [260 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	41.36
Salaries, . . . . .	1.73
Wages, . . . . .	30.10
Rent, . . . . .	2.35
Taxes, . . . . .	0.50
Insurance, . . . . .	0.55
Freight, . . . . .	2.59
New equipment, . . . . .	0.01
Repairs, . . . . .	0.43
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	*20.38
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 23.48 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[260 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	1.87
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.55
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*11.96</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>20.38</b>

\* Equivalent to 16.71 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 538 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 260 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 3,380 employes (both sexes and all ages), . . . . .	*\$393.97
Number of partners, . . . . .	344
Average investment by each partner, . . . . .	\$5,813
Average net profit to each partner, . . . . .	‡\$971
<i>Corporations.</i>	
Average yearly earnings of 377 employes (both sexes and all ages), . . . . .	†\$380.44
Number of stockholders, . . . . .	57
Average investment by each stockholder, . . . . .	\$4,606
Average net profit to each stockholder, . . . . .	‡\$770

\* For 532 private firms.

† For 6 corporations.

‡ Equivalent to 16.71 per cent on average investment.

## Woollen Goods.

## Capital Invested.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	116	\$22,682,718	61.37	75.62
Not making a profit, . . . . .	25	2,824,759	13.23	9.42
Totals, . . . . .	141	\$25,507,477	74.60	85.04
Not answering, . . . . .	48	4,488,191	25.40	14.96
AGGREGATES, . . . . .	189	\$29,995,668	100.00	100.00

## Classified Capital. [189 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$1,731,359	5.77
Buildings and fixtures, . . . . .	5,242,795	17.48
Machinery, . . . . .	6,119,777	20.40
Implements and tools, . . . . .	183,470	0.61
Cash capital, . . . . .	10,461,325	34.88
Supplied by partners or stockholders, . . . . .	1,524,950	5.08
Bills payable, accounts on long time, etc., . . . . .	4,731,992	15.78
TOTAL, . . . . .	\$29,995,668	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$6,974,154	23.25
Machinery, implements, and tools, . . . . .	6,303,247	21.01
Cash capital, . . . . .	10,461,325	34.88
Credit capital, . . . . .	6,256,942	20.86
AGGREGATE, . . . . .	\$29,995,668	100.00

## Selling Price.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	116	\$24,169,607	61.37	76.13
Not making a profit, . . . . .	25	2,664,948	13.23	8.30
Totals, . . . . .	141	\$26,834,555	74.60	84.52
Not answering, . . . . .	48	4,913,723	25.40	15.48
AGGREGATES, . . . . .	189	\$31,748,278	100.00	100.00

## Cost of Production. [141 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	71.58
Salaries, . . . . .	1.77
Wages, . . . . .	20.72
Rent, . . . . .	0.53
Taxes, . . . . .	0.56
Insurance, . . . . .	0.39
Freight, . . . . .	1.67
New equipment, . . . . .	0.46
Repairs, . . . . .	1.61
Other expenses, . . . . .	0.71
TOTAL, . . . . .	100.00

**Woollen Goods — Concluded.***Relation of Cost of Production to Selling Price.* [141 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	60.95
Salaries, . . . . .	1.51
Wages, . . . . .	17.64
Rent, . . . . .	0.45
Taxes, . . . . .	0.48
Insurance, . . . . .	0.33
Freight, . . . . .	1.42
New equipment, . . . . .	0.39
Repairs, . . . . .	1.37
Other expenses, . . . . .	0.61
Excess of Selling Price above Cost of Production, . . . . .	*14.85
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 15.62 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[141 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.85
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.00
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*5.20</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>14.85</b>

\* Equivalent to 5.47 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 189 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 141 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 11,031 employes (both sexes and all ages), . . . . .	*\$301.49
Number of partners, . . . . .	205
Average investment by each partner, . . . . .	\$59,531
Average net profit to each partner, . . . . .	‡\$3,258
<i>Corporations.</i>	
Average yearly earnings of 8,476 employes (both sexes and all ages), . . . . .	†\$278.82
Number of stockholders, . . . . .	838
Average investment by each stockholder, . . . . .	\$15,875
Average net profit to each stockholder, . . . . .	‡\$889

\* For 151 private firms.

† For 38 corporations.

‡ Equivalent to 5.47 per cent on average investment.



**Worsted Goods.***Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Capital Invested
Making a profit, . . . . .	13	\$7,587,118	56.52	70.67
Not making a profit, . . . . .	4	1,236,476	17.39	11.55
Totals, . . . . .	17	\$8,823,594	73.91	82.22
Not answering, . . . . .	6	1,903,302	26.09	17.78
AGGREGATES, . . . . .	23	\$10,726,896	100.00	100.00

*Classified Capital.* [23 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$574,417	5.36
Buildings and fixtures, . . . . .	1,495,487	13.97
Machinery, . . . . .	2,535,258	23.68
Implements and tools, . . . . .	90,761	0.85
Cash capital, . . . . .	2,519,896	23.54
Supplied by partners or stockholders, . . . . .	225,215	2.10
Bills payable, accounts on long time, etc., . . . . .	3,265,862	30.50
TOTAL, . . . . .	\$10,726,896	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$2,069,904	19.33
Machinery, implements, and tools, . . . . .	2,626,019	24.53
Cash capital, . . . . .	2,519,896	23.54
Credit capital, . . . . .	3,491,077	32.60
AGGREGATE, . . . . .	\$10,726,896	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Selling Price
Making a profit, . . . . .	13	\$5,766,982	56.52	60.43
Not making a profit, . . . . .	4	1,521,570	17.39	13.59
Totals, . . . . .	17	\$8,288,552	73.91	74.02
Not answering, . . . . .	6	2,909,596	26.09	25.98
AGGREGATES, . . . . .	23	\$11,198,148	100.00	100.00

*Cost of Production.* [17 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	65.30
Salaries, . . . . .	0.87
Wages, . . . . .	27.95
Rent, . . . . .	0.40
Taxes, . . . . .	0.88
Insurance, . . . . .	0.14
Freight, . . . . .	0.98
New equipment, . . . . .	-
Repairs, . . . . .	3.48
Other expenses, . . . . .	-
TOTAL, . . . . .	100.00

\* Less than one one-hundredth of one per cent.

**Worsteds Goods — Concluded.***Relation of Cost of Production to Selling Price.* [17 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	56.86
Salaries, . . . . .	0.76
Wages, . . . . .	24.33
Rent, . . . . .	0.36
Taxes, . . . . .	0.77
Insurance, . . . . .	0.12
Freight, . . . . .	0.85
New equipment, . . . . .	—
Repairs, . . . . .	3.03
Other expenses, . . . . .	—
Excess of Selling Price above Cost of Production, . . . . .	†12.93
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Less than one one-hundredth of one per cent.

† Equivalent to 12.17 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*

[17 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.98
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.61
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*2.34</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>12.93</b>

\* Equivalent to 2.20 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 23 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 17 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 2,064 employes (both sexes and all ages), . . . . .	*\$250.43
Number of partners, . . . . .	13
Average investment by each partner, . . . . .	\$42,260
Average net profit to each partner, . . . . .	†\$931
<i>Corporations.</i>	
Average yearly earnings of 6,287 employes (both sexes and all ages), . . . . .	†\$306.21
Number of stockholders, . . . . .	238
Average investment by each stockholder, . . . . .	\$34,682
Average net profit to each stockholder, . . . . .	†\$764

\* For 15 private firms.

† For 8 corporations.

‡ Equivalent to 2.20 per cent on average investment.

## ALL INDUSTRIES.

*Capital Invested.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	9,251	\$306,791,926	39.48	61.28
Not making a profit, . . . . .	762	70,919,878	3.25	14.17
Totals, . . . . .	10,013	\$377,711,804	42.73	75.45
Not answering, . . . . .	13,418	122,882,573	57.27	24.55
AGGREGATES, . . . . .	23,431	\$500,594,377	100.00	100.00

*Classified Capital.* [23,431 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$34,412,516	6.87
Buildings and fixtures, . . . . .	84,474,127	16.87
Machinery, . . . . .	100,955,619	20.17
Implements and tools, . . . . .	14,298,711	2.86
Cash capital, . . . . .	173,440,947	34.65
Supplied by partners or stockholders, . . . . .	19,481,405	3.89
Bills payable, accounts on long time, etc., . . . . .	73,531,052	14.69
TOTAL, . . . . .	\$500,594,377	100.00
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$118,886,643	23.74
Machinery, implements, and tools, . . . . .	115,254,330	23.03
Cash capital, . . . . .	173,440,947	34.65
Credit capital, . . . . .	93,012,457	18.58
AGGREGATE, . . . . .	\$500,594,377	100.00

*Selling Price.*

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	9,251	\$414,516,434	39.48	61.44
Not making a profit, . . . . .	762	52,418,619	3.25	7.77
Totals, . . . . .	10,013	\$466,935,053	42.73	69.21
Not answering, . . . . .	13,418	207,701,216	57.27	30.79
AGGREGATES, . . . . .	23,431	\$674,634,269	100.00	100.00

*Cost of Production.* [10,013 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	67.67
Salaries, . . . . .	1.98
Wages, . . . . .	25.66
Rent, . . . . .	0.85
Taxes, . . . . .	0.64
Insurance, . . . . .	0.38
Freight, . . . . .	1.46
New equipment, . . . . .	0.28
Repairs, . . . . .	0.93
Other expenses, . . . . .	0.15
TOTAL, . . . . .	100.00

**ALL INDUSTRIES — CONCLUDED.***Relation of Cost of Production to Selling Price.* [10,013 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	58.91
Salaries, . . . . .	1.73
Wages, . . . . .	22.34
Rent, . . . . .	0.73
Taxes, . . . . .	0.56
Insurance, . . . . .	0.33
Freight, . . . . .	1.27
New equipment, . . . . .	0.24
Repairs, . . . . .	0.81
Other expenses, . . . . .	0.13
Excess of Selling Price above Cost of Production, . . . . .	*12.95
<b>TOTAL, . . . . .</b>	<b>100.00</b>

\* Equivalent to 16.01 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[10,013 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.15
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	1.90
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*3.90</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>12.95</b>

\* Equivalent to 4.83 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 23,431 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 10,013 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 257,656 employes (both sexes and all ages), . . . . .	*\$362.23
Number of partners, . . . . .	12,558
Average investment by each partner, . . . . .	\$10,701
Average net profit to each partner, . . . . .	†\$517
<i>Corporations.</i>	
Average yearly earnings of 162,310 employes (both sexes and all ages), . . . . .	†\$333.22
Number of stockholders, . . . . .	30,967
Average investment by each stockholder, . . . . .	\$7,857
Average net profit to each stockholder, . . . . .	†\$379

\* For 22,482 private firms.

† For 949 corporations.

‡ Equivalent to 4.83 per cent on average investment.

## ANALYSIS.

It has required 130 pages (270-399) of this Part to bring out the statistical facts regarding net profits in manufacturing industries. Including the one for "All Industries," there are 65 presentations, each with seven tables, or a total of 455 tables for all the presentations.

The plan of analytical consideration will be to bring forward for each of the seven tabular presentations a recapitulation by industries, and a summary for "All Industries," presenting with each recapitulation such additional tables as will explain or illustrate the subjects under consideration.

The seven recapitulations cover the following points drawn from the specified number of industry presentations :

Capital Invested, . . . . .	65 tables.
Classified Capital, . . . . .	65 "
Selling Price, . . . . .	65 "
Cost of Production, . . . . .	65 "
Relation of Cost of Production to Selling Price, . . . . .	65 "
Distribution of Excess of Selling Price above Cost of Production, . . . . .	65 "
Comparison of Earnings and Profits, . . . . .	65 "
Total, . . . . .	455 tables.

The 64 industries are brought forward in one table, in each case, while the "All Industries" aggregation is given in a separate table under each heading.

### ESTABLISHMENTS AND CAPITAL INVESTED.

The recapitulation which follows is drawn from the 64 tables headed "Capital Invested," one of which appeared under each industry heading. Numbers are omitted in the recapitulation, percentages only being brought forward, and they show, as regards establishments, the percentage making a profit, the percentage not making a profit, and the percentage not answering of the whole number of establishments in the industry. As regards the amount of capital invested, the percentages show, for each industry, the proportional amounts making a profit, not making a profit, or for which no information on the

point under consideration was supplied. It will be seen, in the recapitulation, that 100 per cent represents the whole number of establishments in the industry, and also, the whole amount of capital invested in the industry; that is, the percentages of establishments making a profit, not making a profit, and those not answering aggregate 100 per cent, as do the percentages representing the amount of capital making a profit, not making a profit, or for which no return was made.

## RECAPITULATION. CAPITAL INVESTED. PERCENTAGES.

INDUSTRIES.	ESTABLISHMENTS —			CAPITAL INVESTED —		
	making a profit	not making a profit	not answer- ing	making a profit	not making a profit	not answer- ing
Agricultural implements, . . . . .	50.00	10.00	40.00	74.01	21.56	4.43
Arms and ammunition, . . . . .	47.50	7.50	45.00	44.34	5.91	49.75
Artificial teeth and dental work, . . . .	21.06	3.48	75.46	26.56	3.82	69.62
Artisans' tools, . . . . .	49.29	5.71	45.00	84.23	7.96	7.81
Boots and shoes, . . . . .	45.10	2.66	52.24	72.60	4.81	22.59
Boxes (paper and wooden), . . . . .	50.23	4.19	45.58	70.84	2.49	26.67
Brick, tiles, and sewer pipe, . . . . .	30.70	3.51	65.79	36.66	3.12	60.22
Brooms, brushes, and mops, . . . . .	40.28	8.33	51.39	64.78	4.43	30.79
Building (including concrete walks, paving, etc.), . . . . .	31.37	0.98	67.65	39.72	2.74	57.54
Burial cases, caskets, coffins, etc., . . .	25.66	1.77	72.57	59.91	3.85	36.24
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	39.68	7.94	52.38	68.23	2.21	29.56
Carriages and wagons, . . . . .	47.88	1.08	51.04	68.75	2.58	28.67
Charcoal and kindlers (including fireworks and matches), . . . . .	25.00	—	75.00	26.94	—	73.06
Chemical preparations, compounded (in- cluding fertilizers), . . . . .	50.00	15.00	35.00	86.32	1.87	11.81
Clothing, . . . . .	32.97	1.42	65.61	46.64	6.52	46.84
Cooking, lighting, and heating apparatus, .	46.15	4.62	49.23	48.52	1.38	50.10
Cordage and twine, . . . . .	63.46	5.77	30.77	89.31	0.36	11.33
Cotton goods, . . . . .	52.73	30.30	16.97	54.66	30.96	14.38
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	13.07	3.78	83.15	40.36	0.67	58.97
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . .	57.90	5.26	36.84	74.74	4.10	21.16
Electrical apparatus and appliances, . . .	52.50	7.50	40.00	58.06	15.88	26.06
Electroplating (including jewelry burnish- ing and lapidary work), . . . . .	66.67	7.14	26.19	75.63	11.70	12.67
Fancy articles (including fine arts and tax- idermy), . . . . .	36.58	2.44	60.98	69.25	1.19	29.56
Flax, hemp, and jute goods (including linen), . . . . .	58.33	16.67	25.00	60.06	44.82	5.12
Food preparations (including salt), . . .	37.41	2.45	60.14	58.76	4.17	37.07
Furniture, . . . . .	44.61	5.80	49.59	68.79	13.31	17.90
Gas and residual products, . . . . .	48.48	4.55	46.97	52.54	1.24	46.22

*Recapitulation. Capital Invested. Percentages — Concluded.*

INDUSTRIES.	ESTABLISHMENTS—			CAPITAL INVESTED—		
	making a profit	not making a profit	not answer- ing	making a profit	not making a profit	not answer- ing
Glass, . . . . .	60.00	—	40.00	42.33	—	57.67
Glue, isinglass, and starch, . . . . .	68.96	6.90	24.14	51.11	13.02	35.87
Hair work (animal and human), . . . . .	38.18	1.82	60.00	82.84	0.01	17.15
Hosiery and knit goods, . . . . .	50.00	3.33	46.67	91.94	4.99	3.07
Ink, mucilage, and paste (including cray- ons, pencils, crucibles, etc.), . . . . .	44.44	—	55.56	33.46	—	66.54
Ivory, bone, shell, and horn goods, etc., . . . . .	61.54	2.56	35.90	72.45	0.36	27.19
Leather, . . . . .	48.64	3.86	47.50	59.97	13.29	26.74
Liquors and beverages (not spirituous), . . . . .	38.09	1.59	60.32	42.10	0.47	57.43
Liquors: malt, distilled, and fermented, . . . . .	39.45	2.75	57.80	70.41	0.69	28.90
Lumber, . . . . .	40.77	5.80	53.43	46.55	7.04	46.41
Machines and machinery, . . . . .	59.00	5.63	35.37	57.04	16.46	26.50
Metals and metallic goods (including clocks and watches), . . . . .	38.00	3.31	58.69	67.91	7.08	25.01
Models and patterns, . . . . .	70.59	1.96	27.45	71.12	0.41	28.47
Musical instruments and materials, . . . . .	67.74	2.15	30.11	63.27	2.56	34.17
Oils and illuminating fluids, . . . . .	25.00	10.71	64.29	21.21	40.41	38.38
Paints, colors, and crude chemicals (includ- ing dyestuffs), . . . . .	51.61	6.45	41.94	73.17	12.74	14.09
Paper and paper goods, . . . . .	59.46	13.51	27.03	72.68	12.45	14.87
Photographs and photographic materials, . . . . .	45.23	2.49	52.28	60.09	1.72	38.19
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	39.74	6.41	53.85	53.01	3.95	43.04
Printing, publishing, and bookbinding, . . . . .	52.61	3.23	43.96	61.28	4.89	33.83
Print works, dye works, and bleacheries, . . . . .	57.29	10.42	32.29	44.47	40.54	14.99
Railroad construction and equipment, . . . . .	40.00	26.67	33.33	32.59	7.00	60.41
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	50.00	6.82	43.18	69.56	2.74	27.70
Scientific instruments and appliances, . . . . .	46.15	3.08	50.77	69.23	5.52	25.25
Shipbuilding (including awnings, tents, and decorations), . . . . .	39.93	2.73	57.34	29.69	1.99	68.32
Silk and silk goods (including buttons and dress trimmings), . . . . .	50.00	7.14	42.86	60.61	5.43	33.96
Sporting and athletic goods, . . . . .	44.45	3.70	51.85	27.47	0.82	71.71
Stone, . . . . .	48.68	2.38	48.94	65.01	5.53	29.46
Straw and palm leaf goods, . . . . .	34.04	6.38	59.58	52.37	16.37	31.26
Tallow, candles, soap, and grease, . . . . .	41.29	5.81	52.90	64.71	1.71	33.58
Tobacco, snuff, and cigars, . . . . .	36.76	4.30	58.94	61.23	8.39	30.39
Toys and games (children's), . . . . .	66.67	6.66	26.67	89.95	8.73	1.27
Trunks and valises, . . . . .	44.00	4.00	52.00	48.32	1.56	50.12
Whips, lashes, and stocks, . . . . .	41.67	1.66	56.67	62.69	0.22	37.19
Wooden goods (including corks, bungs, and taps), . . . . .	44.61	3.72	51.67	60.88	6.89	32.28
Woollen goods, . . . . .	61.37	13.23	25.40	75.62	9.42	14.96
Worsted goods, . . . . .	56.52	17.39	26.09	70.67	11.55	17.78

We shall first consider the percentage of establishments, in each industry, making a profit; next, the percentage not

making a profit; and, finally, the percentage "not answering," or from which no return was received relating to profits.

#### ESTABLISHMENTS MAKING A PROFIT.

In each of the 64 industries considered, as has been stated, 100 per cent represents the aggregation of the respective percentages indicating the proportion of establishments making a profit, not making a profit, and those not answering as regards profits.

The first line in the table below means that in one industry, considering all the establishments in the industry, 10 but under 20 per cent of the establishments were making a profit; it follows that the remainder of the establishments in that industry either did not make a profit, or that reports were not obtained from them as regards the question of profits. The other lines should be read in a similar manner.

CLASSIFICATION OF PERCENTAGES.		Number of Industries
10 but under 20 per cent,	. . . . .	1
20 but under 30 per cent,	. . . . .	4
30 but under 40 per cent,	. . . . .	14
40 but under 50 per cent,	. . . . .	20
50 but under 60 per cent,	. . . . .	16
60 but under 70 per cent,	. . . . .	8
70 but under 80 per cent,	. . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

In the following text-tabular presentation, the various industries are grouped under their proper percentage classification heads:

#### *10 per cent but under 20 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

#### *20 per cent but under 30 per cent.*

Artificial Teeth and Dental Work.	Charcoal and Kindlers (including
Burial Cases, Caskets, Coffins,	Fireworks and Matches).
etc.	Oils and Illuminating Fluids.

#### *30 per cent but under 40 per cent.*

Brick, Tiles, and Sewer Pipe.	Carpetings (including Cotton, Wool-
Building (including Concrete Walks,	len, and Other Textiles, and
Paving, etc.).	Mixed Textiles).



*30 per cent but under 40 per cent—Concluded.*

Clothing.	Metals and Metallic Goods (including Clocks and Watches).
Fancy Articles (including Fine Arts and Taxidermy).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Food Preparations (including Salt).	Shipbuilding (including Awnings, Tents, and Decorations).
Hair Work (Animal and Human).	Straw and Palm Leaf Goods.
Liquors and Beverages (Not Spirituous).	Tobacco, Snuff, and Cigars.
Liquors: Malt, Distilled, and Fermented.	

*40 per cent but under 50 per cent.*

Arms and Ammunition.	Photographs and Photographic Materials.
Artisans' Tools.	Railroad Construction and Equipment.
Boots and Shoes.	Scientific Instruments and Appliances.
Brooms, Brushes, and Mops.	Sporting and Athletic Goods.
Carriages and Wagons.	Stone.
Cooking, Lighting, and Heating Apparatus.	Tallow, Candles, Soap, and Grease.
Furniture.	Trunks and Valises.
Gas and Residual Products.	Whips, Lashes, and Stocks.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Wooden Goods (including Corks, Bungs, and Taps).
Leather.	
Lumber.	

*50 per cent but under 60 per cent.*

Agricultural Implements.	Machines and Machinery.
Boxes (Paper and Wooden).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Chemical Preparations, Compounded (including Fertilizers).	Paper and Paper Goods.
Cotton Goods.	Printing, Publishing, and Book-binding.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Print Works, Dye Works, and Bleacheries.
Electrical Apparatus and Appliances.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Flax, Hemp, and Jute Goods (including Linen).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Hosiery and Knit Goods.	Worsted Goods.

*60 per cent but under 70 per cent.*

Cordage and Twine.	Ivory, Bone, Shell, and Horn Goods, etc.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Musical Instruments and Materials.
Glass.	Toys and Games (Children's).
Glue, Isinglass, and Starch.	Woollen Goods.

*70 per cent but under 80 per cent.*

Models and Patterns.

The preceding text-tabular presentation brings out so forcibly the proportional number of establishments making a profit in each industry that further analysis seems unnecessary. Attention may be called, however, to the three industries with the highest percentages and to the three with the lowest. The highest are: Musical Instruments and Materials, 67.74 per cent; Glue, Isinglass, and Starch, 68.96 per cent; and Models and Patterns, 70.59 per cent. The lowest are: Charcoal and Kindlers (including Fireworks and Matches) and Oils and Illuminating Fluids, each 25 per cent; Artificial Teeth and Dental Work, 21.06 per cent; and Drugs and Medicines (including Perfumes, Toilet Articles, etc.), 13.07 per cent.

#### ESTABLISHMENTS NOT MAKING A PROFIT.

The various parts of the following presentation, relating to establishments not making a profit, are prepared on the same plan as the preceding statement for "Establishments Making a Profit," and should be read and understood in a similar manner:

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	51
10 but under 20 per cent, . . . . .	8
20 but under 30 per cent, . . . . .	1
30 but under 40 per cent, . . . . .	1
No percentage not making a profit, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

We next present the text-tabular classification by percentages.

#### *Under 10 per cent.*

Arms and Ammunition.	Carpetings (including Cotton, Wool-
Artificial Teeth and Dental Work.	len, and Other Textiles, and Mixed
Artisans' Tools.	Textiles).
Boots and Shoes.	Carriages and Wagons.
Boxes (Paper and Wooden).	Clothing.
Brick, Tiles, and Sewer Pipe.	Cooking, Lighting, and Heating Ap-
Brooms, Brushes, and Mops.	paratus.
Building (including Concrete Walks,	Cordage and Twine.
Paving, etc.).	Drugs and Medicines (including
Burial Cases, Caskets, Coffins, etc.	Perfumes, Toilet Articles, etc.).

*Under 10 per cent—Concluded.*

Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Electrical Apparatus and Appli- ances.	Photographs and Photographic Ma- terials.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Fancy Articles (including Fine Arts and Taxidermy).	Printing, Publishing, and Bookbind- ing.
Food Preparations (including Salt). Furniture.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Gas and Residual Products.	Scientific Instruments and Appli- ances.
Glue, Isinglass, and Starch.	Shipbuilding (including Awnings, Tents, and Decorations).
Hair Work (Animal and Human).	Silk and Silk Goods (including But- tons and Dress Trimmings).
Hosiery and Knit Goods.	Sporting and Athletic Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	Stone.
Leather.	Straw and Palm Leaf Goods.
Liquors and Beverages (Not Spirit- uous).	Tallow, Candles, Soap, and Grease.
Liquors: Malt, Distilled, and Fer- mented.	Tobacco, Snuff, and Cigars.
Lumber.	Toys and Games (Children's).
Machines and Machinery.	Trunks and Valises.
Metals and Metallic Goods (includ- ing Clocks and Watches).	Whips, Lashes, and Stocks.
Models and Patterns.	Wooden Goods (including Corks, Bungs, and Taps).
Musical Instruments and Materials.	

*10 per cent but under 20 per cent.*

Agricultural Implements.	Paper and Paper Goods.
Chemical Preparations, Compounded (including Fertilizers).	Print Works, Dye Works, and Bleach- eries.
Flax, Hemp, and Jute Goods (in- cluding Linen).	Woollen Goods.
Oils and Illuminating Fluids.	Worsted Goods.

*20 per cent but under 30 per cent.*

Railroad Construction and Equipment.

*30 per cent but under 40 per cent.*

Cotton Goods.

*No percentage not making a profit.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

The highest percentages are: Worsted Goods, 17.39 per cent; Railroad Construction and Equipment, 26.67 per cent; and Cotton Goods, 30.30 per cent. The lowest percentages are: Clothing, 1.42 per cent; Carriages and Wagons, 1.08 per cent; and Building (including Concrete Walks, Paving, etc.), 0.98 per cent.

#### ESTABLISHMENTS NOT ANSWERING AS REGARDS PROFITS.

The following presentation relating to establishments not answering as regards profits is similar in construction and method of application to the two statements preceding, relating respectively to "Establishments Making a Profit" and "Establishments Not Making a Profit:"

CLASSIFICATION OF PERCENTAGES.		Number of Industries
10 but under 20 per cent,	. . . . .	1
20 but under 30 per cent,	. . . . .	8
30 but under 40 per cent,	. . . . .	8
40 but under 50 per cent,	. . . . .	16
50 but under 60 per cent,	. . . . .	19
60 but under 70 per cent,	. . . . .	8
70 but under 80 per cent,	. . . . .	3
80 but under 90 per cent,	. . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

The industry classification by percentages follows:

#### *10 per cent but under 20 per cent.*

Cotton Goods.

#### *20 per cent but under 30 per cent.*

Electroplating (including Jewelry	Models and Patterns.
Burnishing and Lapidary Work).	Paper and Paper Goods.
Flax, Hemp, and Jute Goods (in-	Toys and Games (Children's).
cluding Linen).	Woollen Goods.
Glue, Isinglass, and Starch.	Worsted Goods.

#### *30 per cent but under 40 per cent.*

Chemical Preparations, Compounded	Machines and Machinery.
(including Fertilizers).	Musical Instruments and Materi-
Cordage and Twine.	als.
Earthen, Plaster, and Stone Ware	Print Works, Dye Works, and Bleach-
(including Cement, Kaolin, Lime,	eries.
and Plaster).	Railroad Construction and Equip-
Ivory, Bone, Shell, and Horn Goods,	ment.
etc.	

*40 per cent but under 50 per cent.*

Agricultural Implements.	Hosiery and Knit Goods.
Arms and Ammunition.	Leather.
Artisans' Tools.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Boxes (Paper and Wooden).	Printing, Publishing, and Book- binding.
Cooking, Lighting, and Heating Apparatus.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Electrical Apparatus and Appli- ances.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Furniture.	Stone.
Gas and Residual Products.	
Glass.	

*50 per cent but under 60 per cent.*

Boots and Shoes.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Brooms, Brushes, and Mops.	Scientific Instruments and Appli- ances.
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Shipbuilding (including Awnings, Tents, and Decorations).
Carriages and Wagons.	Sporting and Athletic Goods.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Straw and Palm Leaf Goods.
Liquors: Malt, Distilled, and Fer- mented.	Tallow, Candles, Soap, and Grease.
Lumber.	Tobacco, Snuff, and Cigars.
Metals and Metallic Goods (includ- ing Clocks and Watches).	Trunks and Valises.
Photographs and Photographic Ma- terials.	Whips, Lashes, and Stocks.
	Wooden Goods (including Corks, Bungs, and Taps).

*60 per cent but under 70 per cent.*

Brick, Tiles, and Sewer Pipe.	Food Preparations (including Salt).
Building (including Concrete Walks, Paving, etc.).	Hair Work (Animal and Human).
Clothing.	Liquors and Beverages (Not Spirit- uous).
Fancy Articles (including Fine Arts and Taxidermy).	Oils and Illuminating Fluids.

*70 per cent but under 80 per cent.*

Artificial Teeth and Dental Work.	Charcoal and Kindlers (including Fireworks and Matches).
Burial Cases, Caskets, Coffins, etc.	

*80 per cent but under 90 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

The highest percentages are: Charcoal and Kindlers (including Fireworks and Matches), 75 per cent; Artificial Teeth and Dental Work, 75.46 per cent; and Drugs and Medicines

(including Perfumes, Toilet Articles, etc.), 83.15 per cent; that is, the last named industry made the fewest returns, proportionally, as regards number of establishments, concerning the question of profits. The lowest percentages are: Flax, Hemp, and Jute Goods (including Linen), 25 per cent; Glue, Isinglass, and Starch, 24.14 per cent; and Cotton Goods, 16.97 per cent; that is, Cotton Goods, as an industry, made the greatest number of returns, proportionally, as regards number of establishments, concerning the question of profits.

CAPITAL INVESTED MAKING A PROFIT.

Having learned from the preceding statements the respective numbers of establishments in each industry making a profit, not making a profit, or from which reports were not obtained as to profits, we now wish to ascertain similar information concerning the capital invested. In considering establishments the basis was number, that is, number of establishments. In considering capital invested the basis is dollars, that is, the respective amounts of capital invested making or paying a profit, not making or paying a profit, or not represented as regards profits. We first consider that portion of capital invested that paid a profit.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
20 but under 30 per cent, . . . . .	5
30 but under 40 per cent, . . . . .	4
40 but under 50 per cent, . . . . .	9
50 but under 60 per cent, . . . . .	11
60 but under 70 per cent, . . . . .	17
70 but under 80 per cent, . . . . .	12
80 but under 90 per cent, . . . . .	5
90 but under 100 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A text-tabular presentation follows in which the 64 industries are arranged under their appropriate percentage classification heads :

20 per cent but under 30 per cent.

- Artificial Teeth and Dental Work.
- Charcoal and Kindlers (including  
Fireworks and Matches).
- Oils and Illuminating Fluids.
- Shipbuilding (including Awnings,  
Tents, and Decorations).
- Sporting and Athletic Goods.

*30 per cent but under 40 per cent.*

Brick, Tiles, and Sewer Pipe.

Building (including Concrete Walks,  
Paving, etc.).Ink, Mucilage, and Paste (including  
Crayons, Pencils, Crucibles, etc.).  
Railroad Construction and Equip-  
ment.*40 per cent but under 50 per cent.*

Arms and Ammunition.

Clothing.

Cooking, Lighting, and Heating Ap-  
paratus.Drugs and Medicines (including  
Perfumes, Toilet Articles, etc.).

Glass.

Liquors and Beverages (Not Spirit-  
uous).

Lumber.

Print Works, Dye Works, and Bleach-  
eries.

Trunks and Valises.

*50 per cent but under 60 per cent.*

Burial Cases, Caskets, Coffins, etc.

Cotton Goods.

Electrical Apparatus and Appliances.

Flax, Hemp, and Jute Goods (includ-  
ing Linen).

Food Preparations (including Salt).

Gas and Residual Products.

Glue, Isinglass, and Starch.

Leather.

Machines and Machinery.

Polishes and Dressing (including  
Emery and Sand Paper and Cloth,  
etc.).

Straw and Palm Leaf Goods.

*60 per cent but under 70 per cent.*

Brooms, Brushes, and Mops.

Carpetings (including Cotton, Wool-  
len, and Other Textiles, and Mixed  
Textiles).

Carriages and Wagons.

Fancy Articles (including Fine Arts  
and Taxidermy).

Furniture.

Metals and Metallic Goods (includ-  
ing Clocks and Watches).

Musical Instruments and Materials.

Photographs and Photographic Ma-  
terials.Printing, Publishing, and Bookbind-  
ing.Rubber and Elastic Goods (includ-  
ing Hose: Rubber, Linen, etc.).Scientific Instruments and Appli-  
ances.Silk and Silk Goods (including But-  
tons and Dress Trimmings).

Stone.

Tallow, Candles, Soap, and Grease.

Tobacco, Snuff, and Cigars.

Whips, Lashes, and Stocks.

Wooden Goods (including Corks,  
Bungs, and Taps).*70 per cent but under 80 per cent.*

Agricultural Implements.

Boots and Shoes.

Boxes (Paper and Wooden).

Earthen, Plaster, and Stone Ware  
(including Cement, Kaolin, Lime,  
and Plaster).Electroplating (including Jewelry  
Burnishing and Lapidary Work).Ivory, Bone, Shell, and Horn Goods,  
etc.Liquors: Malt, Distilled, and Fer-  
mented.

Models and Patterns.

Paints, Colors, and Crude Chemicals  
(including Dyestuffs).

Paper and Paper Goods.

Woollen Goods.

Worsted Goods.

*80 per cent but under 90 per cent.*

Artisans' Tools.

Cordage and Twine.

Chemical Preparations, Compounded  
(including Fertilizers).Hair Work (Animal and Human).  
Toys and Games (Children's).*90 per cent but under 100 per cent.*

Hosiery and Knit Goods.

These percentages do not indicate the percentage of profit in any industry. They mean, simply, that the specified proportions of the capital invested paid some profit, but the actual amount of said profit and its proportion of capital invested, in each industry, are not given until later in this Part under "Distribution of Excess of Selling Price above Cost of Production."

It will be noticed that the percentages have a wide range. The highest are: Cordage and Twine, 88.31 per cent; Toys and Games (Children's), 89.95 per cent; and Hosiery and Knit Goods, 91.94 per cent. On the other hand, we find the lowest are: Charcoal and Kindlers (including Fireworks and Matches), 26.94 per cent; Artificial Teeth and Dental Work, 26.56 per cent; and Oils and Illuminating Fluids, 21.21 per cent.

## CAPITAL INVESTED NOT MAKING A PROFIT.

We present the usual classification of percentages in combination with the number of industries reporting the respective percentages.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	46
10 but under 20 per cent, . . . . .	10
20 but under 30 per cent, . . . . .	1
30 but under 40 per cent, . . . . .	1
40 but under 50 per cent, . . . . .	3
No percentage not making a profit, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

An arrangement of the industries under their respective percentages is subjoined.



*Under 10 per cent.*

Arms and Ammunition.	Liquors: Malt, Distilled, and Fermented.
Artificial Teeth and Dental Work.	Lumber.
Artisans' Tools.	Metals and Metallic Goods (including Clocks and Watches).
Boots and Shoes.	Models and Patterns.
Boxes (Paper and Wooden).	Musical Instruments and Materials.
Brick, Tiles, and Sewer Pipe.	Photographs and Photographic Materials.
Brooms, Brushes, and Mops.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Building (including Concrete Walks, Paving, etc.).	Printing, Publishing, and Bookbinding.
Burial Cases, Caskets, Coffins, etc.	Railroad Construction and Equipment.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Carriages and Wagons.	Scientific Instruments and Appliances.
Chemical Preparations, Compounded (including Fertilizers).	Shipbuilding (including Awnings, Tents, and Decorations).
Clothing.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Cooking, Lighting, and Heating Apparatus.	Sporting and Athletic Goods.
Cordage and Twine.	Stone.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Tallow, Candles, Soap, and Grease.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Tobacco, Snuff, and Cigars.
Fancy Articles (including Fine Arts and Taxidermy).	Toys and Games (Children's).
Food Preparations (including Salt).	Trunks and Valises.
Gas and Residual Products.	Whips, Lashes, and Stocks.
Hair Work (Animal and Human).	Wooden Goods (including Corks, Bunges, and Taps).
Hosiery and Knit Goods.	Woollen Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	
Liquors and Beverages (Not Spirituous).	

*10 per cent but under 20 per cent.*

Electrical Apparatus and Appliances.	Machines and Machinery.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Furniture.	Paper and Paper Goods.
Glue, Isinglass, and Starch.	Straw and Palm Leaf Goods.
Leather.	Worsted Goods.

*20 per cent but under 30 per cent.*

Agricultural Implements.

*30 per cent but under 40 per cent.*

Cotton Goods.

*40 per cent but under 50 per cent.*

Flax, Hemp, and Jute Goods (including Linen).      Print Works, Dye Works, and Bleacheries.  
Oils and Illuminating Fluids.

*No percentage not making a profit.*

Charcoal and Kindlers (including Fireworks and Matches).      Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).  
Glass.

The largest number of industries will be found under the lowest percentage classification. The highest are: Oils and Illuminating Fluids, 40.41 per cent; Print Works, Dye Works, and Bleacheries, 40.54 per cent; Flax, Hemp, and Jute Goods (including Linen), 44.82 per cent. The lowest ones are as follows: Cordage and Twine, and Ivory, Bone, Shell, and Horn Goods, etc., each with 0.36 per cent; Whips, Lashes, and Stocks, 0.22 per cent; and Hair Work (Animal and Human), 0.01 per cent.

## CAPITAL INVESTED NOT REPRESENTED AS REGARDS PROFITS.

In each of the industries there are certain establishments from which returns were not obtained as to profits, and, consequently, in each industry, there is a certain percentage of capital invested that is not represented so that we are unable to state whether the capital invested in question paid a profit or not.\* It will be seen that capital invested "not represented" corresponds with establishments "not answering." The classified percentage table is first given.

CLASSIFICATION OF PERCENTAGES.										Number of Industries
Under 10 per cent,	.	.	.	.	.	.	.	.	.	5
10 but under 20 per cent,	.	.	.	.	.	.	.	.	.	11
20 but under 30 per cent,	.	.	.	.	.	.	.	.	.	16
30 but under 40 per cent,	.	.	.	.	.	.	.	.	.	14
40 but under 50 per cent,	.	.	.	.	.	.	.	.	.	5
50 but under 60 per cent,	.	.	.	.	.	.	.	.	.	6
60 but under 70 per cent,	.	.	.	.	.	.	.	.	.	5
70 but under 80 per cent,	.	.	.	.	.	.	.	.	.	2
WHOLE NUMBER OF INDUSTRIES, .										64

\* For remarks as to the character of the establishments not reporting, and its effect on the scope of the investigation, see pages 416, 417.

We append a classification of the industries under their appropriate percentage heads.

*Under 10 per cent.*

Agricultural Implements.	Hosiery and Knit Goods.
Artisans' Tools.	Toys and Games (Children's).
Flax, Hemp, and Jute Goods (including Linen).	

*10 per cent but under 20 per cent.*

Chemical Preparations, Compounded (including Fertilizers).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Cordage and Twine.	Paper and Paper Goods.
Cotton Goods.	Print Works, Dye Works, and Bleacheries.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Woollen Goods.
Furniture.	Worsted Goods.
Hair Work (Animal and Human).	

*20 per cent but under 30 per cent.*

Boots and Shoes.	Ivory, Bone, Shell, and Horn Goods. etc.
Boxes (Paper and Wooden).	Leather.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Liquors: Malt, Distilled, and Fermented.
Carriages and Wagons.	Machines and Machinery.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Metals and Metallic Goods (including Clocks and Watches).
Electrical Apparatus and Appliances.	Models and Patterns.
Fancy Articles (including Fine Arts and Taxidermy).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
	Scientific Instruments and Appliances.
	Stone.

*30 per cent but under 40 per cent.*

Brooms, Brushes, and Mops.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Burial Cases, Caskets, Coffins, etc.	Straw and Palm Leaf Goods.
Food Preparations (including Salt).	Tallow, Candles, Soap, and Grease.
Glue, Isinglass, and Starch.	Tobacco, Snuff, and Cigars.
Musical Instruments and Materials.	Whips, Lashes, and Stocks.
Oils and Illuminating Fluids.	Wooden Goods (including Corks, Bunges, and Taps).
Photographs and Photographic Materials.	
Printing, Publishing, and Bookbinding.	

*40 per cent but under 50 per cent.*

<b>Arms and Ammunition.</b>	Polishes and Dressing (including
<b>Clothing.</b>	Emery and Sand Paper and Cloth,
<b>Gas and Residual Products.</b>	etc.).
<b>Lumber.</b>	

*50 per cent but under 60 per cent.*

<b>Building (including Concrete Walks, Paving, etc.).</b>	Glass.
<b>Cooking, Lighting, and Heating Apparatus.</b>	Liquors and Beverages (Not Spirituous).
<b>Drugs and Medicines (including Perfumes, Toilet Articles, etc.).</b>	Trunks and Valises.

*60 per cent but under 70 per cent.*

<b>Artificial Teeth and Dental Work.</b>	Railroad Construction and Equip-
<b>Brick, Tiles, and Sewer Pipe.</b>	ment.
<b>Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).</b>	Shipbuilding (including Awnings, Tents, and Decorations).

*70 per cent but under 80 per cent.*

<b>Charcoal and Kindlers (including Fireworks and Matches).</b>	Sporting and Athletic Goods.
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The customary variation in percentages occurs. The highest are: Artificial Teeth and Dental Work, 69.62 per cent; Sporting and Athletic Goods, 71.71 per cent; Charcoal and Kindlers (including Fireworks and Matches), 73.06 per cent; this means that the industry last mentioned made, comparatively, the fewest returns as regards capital invested, only 26.94 per cent of the total capital invested in the industry being represented as regards profits.

The lowest proportions represented are as follows: Agricultural Implements, 4.43 per cent; Hosiery and Knit Goods, 3.07 per cent; and Toys and Games (Children's), 1.27 per cent; that is, in the three industries last mentioned, 95.57, 96.93, and 98.73 per cent of the total capital invested in these industries were represented, respectively, as regards capital invested, on the question of profits.

**ESTABLISHMENTS AND CAPITAL INVESTED IN ALL INDUSTRIES.**

We reproduce, from the "All Industries" presentation on page 398, *ante*, the table relating to "Capital Invested" which includes "Establishments."

## CAPITAL INVESTED. ALL INDUSTRIES.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Amount of Capital In- vested	PERCENTAGES	
			Estab- lishments	Capital Invested
Making a profit, . . . . .	9,251	\$306,791,926	39.48	61.28
Not making a profit, . . . . .	762	70,919,878	3.25	14.17
Totals, . . . . .	10,013	\$377,711,804	42.73	75.45
Not answering, . . . . .	13,418	122,882,573	57.27	24.55
AGGREGATES, . . . . .	23,431	\$500,594,377	100.00	100.00

This table will repay careful consideration in detail. First, as to establishments; there are, in the 64 industries considered, 23,431 establishments, including both private firms and corporations. This aggregate number of establishments is derived from the returns of the Decennial Census of 1885. Of the aggregate number, 9,251, or 39.48 per cent, have reported that they made a profit; 762, or 3.25 per cent, have reported that they did not make a profit, while 13,418, or 57.27 per cent, have made no return as regards the question of profits. Combining the establishments both making and not making a profit, we secure 10,013, or 42.73 per cent. This percentage might lead the superficial reader to assume that the showing was not fully representative because less than one-half of all the manufacturing establishments in the 64 industries are compassed by the investigation. Such a conclusion on the part of the reader would be manifestly erroneous, for the *number* of establishments included is far from being indicative of the scope of the investigation. To bring the extent of the investigation into full and proper prominence we shall here consider the capital invested represented by the establishments, and, subsequently, the value of the goods made and work done in these establishments.

The second division of our consideration of the "All Industries" table relates to the amount of capital invested. We see that the grand aggregate for the 23,431 establishments, in the 64 industries, was \$500,594,377. Of this vast amount, \$377,711,804 are comprehended in the profit showing, or 75.45 per cent. This may be subdivided into \$306,791,926,

or 61.28 per cent, making a profit, and \$70,919,878, or 14.17 per cent, not making a profit.

The 13,418 establishments that are not included in the profit showing (or 57.27 per cent of all establishments) had capital invested to the amount of \$122,882,573, or 24.55 per cent, being less than one-quarter of the whole amount invested in all industries.

We now see, as regards capital invested, the comparative importance and proper influence of the 13,418 establishments not included in the profit showing. Although they form 57.27 per cent of all establishments, they have but 24.55 per cent of the total capital invested. On the other hand, the 10,013 establishments reporting as to profits, though forming but 42.73 per cent of the whole number of establishments, represent 75.45 per cent of the grand aggregate of capital invested in all establishments in all industries.

For the reason that the 10,013 establishments reporting as to profits represent more than three times as much capital invested as those not reporting, we feel warranted in claiming the presentations in this Part as fully compassing the question under consideration, that is, profits in manufacturing industries in Massachusetts. It should be understood also that the 23,431 establishments reported in the Decennial Census include many which, while really establishments of productive industry, would not be popularly considered manufacturing establishments. This number includes, for instance, establishments in numerous mechanical industries carried on by persons working singly or aided by a small number of employes, engaged, in many cases, for a part of the time only. The small concerns comprise a large proportion of the 13,418 establishments not represented in the present investigation. Returns from them are properly included in a Census, but in special inquiries like the one undertaken, respecting profits, they are comparatively unimportant.

#### ESTABLISHMENTS REPORTING AND CAPITAL REPRESENTED IN THIS INVESTIGATION.

In the preceding presentation and discussion of "Establishments and Capital Invested," the whole number of establishments and the total amount of capital invested as shown by the

State Census of 1885 have each been considered as 100 per cent. The arrangement of the tables has been such that the respective percentages of establishments making a profit, of those not making a profit, and of those not reporting as regards profits, when combined made 100 per cent, representing 23,431 establishments. In the same way, the percentages of capital invested making a profit, of capital invested not making a profit, and of capital invested not represented as regards profits, when aggregated made 100 per cent, representing the total investment of \$500,594,377.

In the present consideration we propose to omit those establishments from which returns as to profits were not obtained and also to disregard the capital invested that is not represented as regards profits and to deal only with establishments and capital making returns as to profits, considering the establishments reporting and the capital represented as each forming 100 per cent.

#### ESTABLISHMENTS REPORTING.

The first presentation shows the number of establishments reporting as regards profits, the number making a profit and the number not making a profit. These numbers are reduced to percentages, the percentages of establishments making a profit and not making a profit being respectively shown.

INDUSTRIES.	NUMBER OF ESTABLISHMENTS—			PERCENTAGES OF ESTABLISHMENTS—	
	answering as regards profits	making a profit	not making a profit	making a profit	not making a profit
Agricultural implements, . . . . .	18	15	3	83.33	16.67
Arms and ammunition, . . . . .	22	19	3	86.36	13.64
Artificial teeth and dental work, . . . . .	120	103	17	85.83	14.17
Artisans' tools, . . . . .	77	69	8	89.61	10.39
Boots and shoes, . . . . .	1,130	1,067	63	94.42	5.58
Boxes (paper and wooden), . . . . .	117	108	9	92.31	7.69
Brick, tiles, and sewer pipe, . . . . .	39	35	4	89.74	10.26
Brooms, brushes, and mops, . . . . .	35	29	6	82.86	17.14
Building (including concrete walks, paving, etc.), . . . . .	1,227	1,190	37	96.98	3.02
Burial cases, caskets, coffins, etc., . . . . .	31	29	2	93.55	6.45
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	30	25	5	83.33	16.67
Carriages and wagons, . . . . .	496	485	11	97.78	2.22
Charcoal and kindlers (including fireworks and matches), . . . . .	4	4	—	100.00	—

INDUSTRIES.	NUMBER OF ESTABLISHMENTS —			PERCENTAGES OF ESTABLISHMENTS —	
	answering as regards profits	making a profit	not making a profit	making a profit	not making a profit
Chemical preparations, compounded (including fertilizers), . . . . .	26	20	6	76.92	23.08
Clothing, . . . . .	826	792	34	95.88	4.12
Cooking, lighting, and heating apparatus, . . . . .	33	30	3	90.91	9.09
Cordage and twine, . . . . .	36	33	3	91.67	8.33
Cotton goods, . . . . .	137	87	50	63.50	36.50
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	156	121	35	77.56	22.44
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	24	22	2	91.67	8.33
Electrical apparatus and appliances, . . . . .	24	21	3	87.50	12.50
Electroplating (including jewelry burnishing and lapidary work), . . . . .	31	28	3	90.32	9.68
Fancy articles (including fine arts and taxidermy), . . . . .	16	15	1	93.75	6.25
Flax, hemp, and jute goods (including linen), . . . . .	9	7	2	77.78	22.22
Food preparations (including salt), . . . . .	684	642	42	93.86	6.14
Furniture, . . . . .	304	269	35	88.49	11.51
Gas and residual products, . . . . .	35	32	3	91.43	8.57
Glass, . . . . .	12	12	—	100.00	—
Glue, isinglass, and starch, . . . . .	22	20	2	90.91	9.09
Hair work (animal and human), . . . . .	22	21	1	95.45	4.55
Hosiery and knit goods, . . . . .	32	30	2	93.75	6.25
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	12	12	—	100.00	—
Ivory, bone, shell, and horn goods, etc., . . . . .	25	24	1	96.00	4.00
Leather, . . . . .	367	340	27	92.64	7.36
Liquors and beverages (not spirituous), . . . . .	25	24	1	96.00	4.00
Liquors: malt, distilled, and fermented, . . . . .	92	86	6	93.48	6.52
Lumber, . . . . .	217	190	27	87.56	12.44
Machines and machinery, . . . . .	402	367	35	91.29	8.71
Metals and metallic goods (including clocks and watches), . . . . .	1,148	1,056	92	91.99	8.01
Models and patterns, . . . . .	37	36	1	97.30	2.70
Musical instruments and materials, . . . . .	65	63	2	96.92	3.08
Oils and illuminating fluids, . . . . .	10	7	3	70.00	30.00
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	18	16	2	88.89	11.11
Paper and paper goods, . . . . .	108	88	20	81.48	18.52
Photographs and photographic materials, . . . . .	115	109	6	94.78	5.22
Pollishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	36	31	5	86.11	13.89
Printing, publishing, and bookbinding, . . . . .	399	376	23	94.24	5.76
Print works, dye works, and bleacheries, . . . . .	65	55	10	84.62	15.38
Railroad construction and equipment, . . . . .	10	6	4	60.00	40.00
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	25	22	3	88.00	12.00
Scientific instruments and appliances, . . . . .	32	30	2	93.75	6.25
Shipbuilding (including awnings, tents, and decorations), . . . . .	125	117	8	93.60	6.40



INDUSTRIES.	NUMBER OF ESTABLISHMENTS —			PERCENTAGES OF ESTABLISHMENTS —	
	answering as regards profits	making a profit	not making a profit	making a profit	not making a profit
Silk and silk goods (including buttons and dress trimmings), . . . . .	16	14	2	87.50	12.50
Sporting and athletic goods, . . . . .	13	12	1	92.31	7.69
Stone, . . . . .	193	184	9	95.34	4.66
Straw and palm leaf goods, . . . . .	19	16	3	84.21	15.79
Tallow, candles, soap, and grease, . . . . .	73	64	9	87.67	12.33
Tobacco, snuff, and cigars, . . . . .	124	111	13	89.52	10.48
Toys and games (children's), . . . . .	11	10	1	90.91	9.09
Trunks and valises, . . . . .	12	11	1	91.67	8.33
Whips, lashes, and stocks, . . . . .	26	25	1	96.15	3.85
Wooden goods (including corks, bungs, and taps), . . . . .	260	240	20	92.31	7.69
Woollen goods, . . . . .	141	116	25	82.27	17.73
Worsted goods, . . . . .	17	13	4	76.47	23.53

We adopt the same method of analytical treatment for this presentation as for the one given on page 403, *ante*, first considering —

#### ESTABLISHMENTS REPORTING MAKING A PROFIT.

The table which follows gives the number of industries in which specified percentages of the whole number of establishments reporting are making a profit :

CLASSIFICATION OF PERCENTAGES.	Number of Industries
60 but under 70 per cent, . . . . .	2
70 but under 80 per cent, . . . . .	5
80 but under 90 per cent, . . . . .	20
90 but under 100 per cent, . . . . .	34
100 per cent, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A classification by industries under their appropriate percentage heads is subjoined.

#### 60 per cent but under 70 per cent.

Cotton Goods.

Railroad Construction and Equipment.

#### 70 per cent but under 80 per cent.

Chemical Preparations, Compounded (including Fertilizers).

Flax, Hemp, and Jute Goods (including Linen).

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

Oils and Illuminating Fluids.  
Worsted Goods.

*80 per cent but under 90 per cent.*

Agricultural Implements.  
 Arms and Ammunition.  
 Artificial Teeth and Dental Work.  
 Artisans' Tools.  
 Brick, Tiles, and Sewer Pipe.  
 Brooms, Brushes, and Mops.  
 Carpetings (including Cotton, Wool-  
 len, and Other Textiles, and Mixed  
 Textiles).  
 Electrical Apparatus and Appliances.  
 Furniture.  
 Lumber.  
 Paints, Colors, and Crude Chemicals  
 (including Dyestuffs).

Paper and Paper Goods.  
 Polishes and Dressing (including  
 Emery and Sand Paper and Cloth,  
 etc.).  
 Print Works, Dye Works, and Bleach-  
 eries.  
 Rubber and Elastic Goods (including  
 Hose: Rubber, Linen, etc.).  
 Silk and Silk Goods (including But-  
 tons and Dress Trimmings).  
 Straw and Palm Leaf Goods.  
 Tallow, Candles, Soap, and Grease.  
 Tobacco, Snuff, and Cigars.  
 Woollen Goods.

*90 per cent but under 100 per cent.*

Boots and Shoes.  
 Boxes (Paper and Wooden).  
 Building (including Concrete Walks,  
 Paving, etc.).  
 Burial Cases, Caskets, Coffins, etc.  
 Carriages and Wagons.  
 Clothing.  
 Cooking, Lighting, and Heating Ap-  
 paratus.  
 Cordage and Twine.  
 Earthen, Plaster, and Stone Ware  
 (including Cement, Kaolin, Lime,  
 and Plaster).  
 Electroplating (including Jewelry  
 Burnishing and Lapidary Work).  
 Fancy Articles (including Fine Arts  
 and Taxidermy).  
 Food Preparations (including Salt).  
 Gas and Residual Products.  
 Glue, Isinglass, and Starch.  
 Hair Work (Animal and Human).  
 Hosiery and Knit Goods.  
 Ivory, Bone, Shell, and Horn Goods,  
 etc.  
 Leather.

Liquors and Beverages (Not Spirit-  
 uous).  
 Liquors: Malt, Distilled, and Fer-  
 mented.  
 Machines and Machinery.  
 Metals and Metallic Goods (includ-  
 ing Clocks and Watches).  
 Models and Patterns.  
 Musical Instruments and Materi-  
 als.  
 Photographs and Photographic Ma-  
 terials.  
 Printing, Publishing, and Bookbind-  
 ing.  
 Scientific Instruments and Appli-  
 ances.  
 Shipbuilding (including Awnings,  
 Tents, and Decorations).  
 Sporting and Athletic Goods.  
 Stone.  
 Toys and Games (Children's).  
 Trunks and Valises.  
 Whips, Lashes, and Stocks.  
 Wooden Goods (including Corks,  
 Bungs, and Taps).

*100 per cent.*

Charcoal and Kindlers (including  
 Fireworks and Matches).  
 Glass.

Ink, Mucilage, and Paste (including  
 Crayons, Pencils, Crucibles, etc.).

The elimination of the establishments from which reports as to profits were not obtained shows some marked differences in the

range of the percentages when compared with those shown on page 407, *ante*. The three highest are: Models and Patterns, 97.30 per cent; Carriages and Wagons, 97.78 per cent; and 100 per cent for each of the three industries — Charcoal and Kindlers (including Fireworks and Matches), Glass, and Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).

The three lowest are: Oils and Illuminating Fluids, 70 per cent; Cotton Goods, 63.50 per cent; and Railroad Construction and Equipment, 60 per cent.

### ESTABLISHMENTS REPORTING NOT MAKING A PROFIT.

We present, first, the customary percentage classification.

CLASSIFICATION OF PERCENTAGES.		Number of Industries
Under 10 per cent,	.	34
10 but under 20 per cent,	.	20
20 but under 30 per cent,	.	4
30 but under 40 per cent,	.	2
40 but under 50 per cent,	.	1
No percentage not making a profit,	.	3
WHOLE NUMBER OF INDUSTRIES,		64

We next classify the 64 industries under their proper percentage heads, with the following result:

#### *Under 10 per cent.*

Boots and Shoes.	Glue, Isinglass, and Starch.
Boxes (Paper and Wooden).	Hair Work (Animal and Human).
Building (including Concrete Walks, Paving, etc.).	Hosiery and Knit Goods.
Burial Cases, Caskets, Coffins, etc.	Ivory, Bone, Shell, and Horn Goods, etc.
Carriages and Wagons.	Leather.
Clothing.	Liquors and Beverages (Not Spirit- uous).
Cooking, Lighting, and Heating Ap- paratus.	Liquors: Malt, Distilled, and Fer- mented.
Cordage and Twine.	Machines and Machinery.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Metals and Metallic Goods (includ- ing Clocks and Watches).
Electroplating (including Jewelry Burnishing and Lapidary Work).	Models and Patterns.
Fancy Articles (including Fine Arts and Taxidermy).	Musical Instruments and Materials.
Food Preparations (including Salt).	Photographs and Photographic Ma- terials.
Gas and Residual Products.	Printing, Publishing, and Bookbind- ing.

*Under 10 per cent — Concluded.*

Scientific Instruments and Appliances.	Toys and Games (Children's).
Shipbuilding (including Awnings, Tents, and Decorations).	Trunks and Valises.
Sporting and Athletic Goods.	Whips, Lashes, and Stocks.
Stone.	Wooden Goods (including Corks, Bungs, and Taps).

*10 per cent but under 20 per cent.*

Agricultural Implements.	Paper and Paper Goods.
Arms and Ammunition.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Artificial Teeth and Dental Work.	Print Works, Dye Works, and Bleacheries.
Artisans' Tools.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Brick, Tiles, and Sewer Pipe.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Brooms, Brushes, and Mops.	Straw and Palm Leaf Goods.
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Tallow, Candles, Soap, and Grease.
Electrical Apparatus and Appliances.	Tobacco, Snuff, and Cigars.
Furniture.	Woollen Goods.
Lumber.	
Paints, Colors, and Crude Chemicals (including Dyestuffs).	

*20 per cent but under 30 per cent.*

Chemical Preparations, Compounded (including Fertilizers).	Flax, Hemp, and Jute Goods (in- cluding Linen).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Worsted Goods.

*30 per cent but under 40 per cent.*

Cotton Goods.	Oils and Illuminating Fluids.
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*40 per cent but under 50 per cent.*

Railroad Construction and Equipment.

*No percentage not making a profit.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

In three industries all of the establishments made a profit. These are the three previously enumerated under the heading "No percentage not making a profit." In each of the other industries there is found a certain percentage of establishments not making a profit.

The three industries having the greatest proportion of establishments not making a profit are : Oils and Illuminating Fluids with 30 per cent ; Cotton Goods, 36.50 per cent ; and Railroad

Construction and Equipment, 40 per cent. The three industries having the smallest proportion of establishments not making a profit are: Building (including Concrete Walks, Paving, etc.), 3.02 per cent; Models and Patterns, 2.70 per cent; and Carriages and Wagons, 2.22 per cent.

### CAPITAL REPRESENTED.

The total amount of capital represented as regards profits, and the proportional amounts making a profit and not making a profit are shown in the succeeding table. These proportional amounts are brought to the percentage form, giving the percentages making a profit and not making a profit for each of the 64 industries.

INDUSTRIES.	CAPITAL REPRESENTED—			PERCENTAGES OF CAPITAL—	
	as regards profits	making a profit	not making a profit	making a profit	not making a profit
Agricultural implements, . . . . .	\$2,076,629	\$1,608,114	\$468,515	77.44	22.56
Arms and ammunition, . . . . .	2,256,815	1,991,383	265,432	88.24	11.76
Artificial teeth and dental work, . . . . .	75,988	66,440	9,548	87.43	12.57
Artisans' tools, . . . . .	3,398,019	3,104,730	293,289	91.37	8.63
Boots and shoes, . . . . .	26,561,156	24,910,788	1,650,368	93.79	6.21
Boxes (paper and wooden), . . . . .	1,822,219	1,760,254	61,965	96.60	3.40
Brick, tiles, and sewer pipe, . . . . .	900,046	829,459	70,587	92.16	7.84
Brooms, brushes, and mops, . . . . .	466,043	436,218	29,825	93.60	6.40
Building (including concrete walks, paving, etc.), . . . . .	4,818,926	4,508,101	310,825	93.56	6.44
Burial cases, caskets, coffins, etc., . . . . .	273,015	256,515	16,500	93.96	6.04
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	8,706,519	8,433,019	273,500	96.86	3.14
Carriages and wagons, . . . . .	3,427,282	3,303,282	124,000	96.38	3.62
Charcoal and kindlers (including fire-works and matches), . . . . .	19,350	19,350	-	100.00	-
Chemical preparations, compounded (including fertilizers), . . . . .	3,636,636	3,559,716	76,920	97.88	2.12
Clothing, . . . . .	6,592,183	5,783,930	808,253	87.74	12.26
Cooking, lighting, and heating apparatus, . . . . .	1,521,370	1,479,370	42,000	97.24	2.76
Cordage and twine, . . . . .	3,768,572	3,753,272	15,300	99.59	0.41
Cotton goods, . . . . .	101,844,949	65,022,512	36,822,437	63.84	36.16
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	709,929	693,429	11,500	98.38	1.62
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	407,166	385,966	21,200	94.79	5.21
Electrical apparatus and appliances, . . . . .	1,931,654	1,516,745	414,909	78.52	21.48
Electroplating (including jewelry burnishing and lapidary work), . . . . .	99,595	86,245	13,350	86.60	13.40
Fancy articles (including fine arts and taxidermy), . . . . .	44,260	43,510	750	98.31	1.69

INDUSTRIES.	CAPITAL REPRESENTED—			PERCENTAGES OF CAPITAL—	
	as regards profits	making a profit	not making a profit	making a profit	not making a profit
Flax, hemp, and jute goods (including linen), . . . . .	\$2,328,500	\$1,228,500	\$1,100,000	52.78	47.24
Food preparations (including salt), . . .	13,128,503	12,259,081	869,422	93.38	6.62
Furniture, . . . . .	7,646,776	6,407,079	1,239,697	83.79	16.21
Gas and residual products, . . . . .	7,994,444	7,809,744	184,700	97.69	2.31
Glass, . . . . .	388,487	388,487	—	100.00	—
Glue, isinglass, and starch, . . . . .	810,004	645,504	164,500	79.69	20.31
Hair work (animal and human), . . . .	175,091	175,066	25	99.99	0.01
Hosiery and knit goods, . . . . .	3,945,926	3,742,766	203,160	94.85	5.15
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . .	71,225	71,225	—	100.00	—
Ivory, bone, shell, and horn goods, etc., .	1,755,743	1,747,043	8,700	99.50	0.50
Leather, . . . . .	8,981,009	7,351,502	1,629,507	81.86	18.14
Liquors and beverages (not spirituous), .	182,387	180,387	2,000	98.90	1.10
Liquors: malt, distilled, and fermented, .	4,387,173	4,344,858	42,315	99.04	0.96
Lumber, . . . . .	1,563,077	1,357,768	205,309	86.87	13.13
Machines and machinery, . . . . .	18,185,414	14,111,975	4,073,439	77.60	22.40
Metals and metallic goods (including clocks and watches), . . . . .	28,909,908	26,181,549	2,728,359	90.56	9.44
Models and patterns, . . . . .	70,005	69,605	400	99.43	0.57
Musical instruments and materials, . . .	3,258,862	3,132,062	126,800	96.11	3.89
Oils and illuminating fluids, . . . . .	1,108,308	379,710	728,598	34.42	65.58
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	959,884	817,578	142,306	85.17	14.83
Paper and paper goods, . . . . .	18,711,571	15,975,662	2,735,909	85.88	14.62
Photographs and photographic materials, .	362,869	352,744	10,125	97.21	2.79
Polishes and dressing (including emery and sand paper and cloth, etc.), . . .	1,066,942	992,952	73,990	93.07	6.93
Printing, publishing, and bookbinding, .	6,983,542	6,467,772	515,770	92.61	7.39
Print works, dye works, and bleacheries, .	13,764,876	7,201,355	6,563,521	52.32	47.68
Railroad construction and equipment, . .	632,848	520,873	111,975	82.31	17.69
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	8,082,932	7,776,782	306,150	96.21	3.79
Scientific instruments and appliances, . .	603,814	550,214	44,600	92.61	7.39
Shipbuilding (including awnings, tents, and decorations), . . . . .	364,380	341,430	22,950	93.70	6.30
Silk and silk goods (including buttons and dress trimmings), . . . . .	1,747,226	1,603,636	143,590	91.78	8.22
Sporting and athletic goods, . . . . .	106,380	103,280	3,100	97.09	2.91
Stone, . . . . .	2,713,104	2,500,538	212,516	92.17	7.83
Straw and palm leaf goods, . . . . .	2,063,189	1,571,764	491,425	76.18	23.82
Tallow, candles, soap, and grease, . . .	1,042,262	1,015,490	26,772	97.43	2.57
Tobacco, snuff, and cigars, . . . . .	754,525	663,550	90,975	87.94	12.06
Toys and games (children's), . . . . .	292,235	266,235	26,000	91.10	8.90
Trunks and valises, . . . . .	64,160	62,160	2,000	96.88	3.12
Whips, lashes, and stocks, . . . . .	577,568	575,568	2,000	99.66	0.35
Wooden goods (including corks, bungs, and taps), . . . . .	2,262,263	2,032,193	230,065	89.83	10.17
Woollen goods, . . . . .	25,507,477	22,682,718	2,824,759	88.63	11.07
Worsted goods, . . . . .	8,803,504	7,567,118	1,236,476	85.95	14.05

The method of consideration is the same for "Capital Represented" as for "Establishments Reporting." We first consider —

### CAPITAL REPRESENTED MAKING A PROFIT.

The arrangement of industries as regards classified percentages is as follows :

CLASSIFICATION OF PERCENTAGES.		Number of Industries
30 but under 40 per cent, . . . . .		1
50 but under 60 per cent, . . . . .		2
60 but under 70 per cent, . . . . .		1
70 but under 80 per cent, . . . . .		5
80 but under 90 per cent, . . . . .		14
90 but under 100 per cent, . . . . .		34
100 per cent, . . . . .		3
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

As usual, we place each of the 64 industries under its proper percentage head.

#### *30 per cent but under 40 per cent.*

Oils and Illuminating Fluids.

#### *50 per cent but under 60 per cent.*

Flax, Hemp, and Jute Goods (including Linen).      Print Works, Dye Works, and Bleacheries.

#### *60 per cent but under 70 per cent.*

Cotton Goods.

#### *70 per cent but under 80 per cent.*

Agricultural Implements.      Glue, Isinglass, and Starch.  
Electrical Apparatus and Appliances.      Machines and Machinery.  
Straw and Palm Leaf Goods.

#### *80 per cent but under 90 per cent.*

Arms and Ammunition.      Paper and Paper Goods.  
Artificial Teeth and Dental Work.      Railroad Construction and Equipment.  
Clothing.      Tobacco, Snuff, and Cigars.  
Electroplating (including Jewelry Burnishing and Lapidary Work).      Wooden Goods (including Corks, Bungs, and Taps).  
Furniture.      Woollen Goods.  
Leather.      Worsted Goods.  
Lumber.  
Paints, Colors, and Crude Chemicals (including Dyestuffs).

*90 per cent but under 100 per cent.*

Artisans' Tools.	Liquors and Beverages (Not Spirituous).
Boots and Shoes.	Liquors: Malt, Distilled, and Fermented.
Boxes (Paper and Wooden).	Metals and Metallic Goods (including Clocks and Watches).
Brick, Tiles, and Sewer Pipe.	Models and Patterns.
Brooms, Brushes, and Mops.	Musical Instruments and Materials.
Building (including Concrete Walks, Paving, etc.).	Photographs and Photographic Materials.
Burial Cases, Caskets, Coffins, etc.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Carpetings (including Cotton, Wool-len, and Other Textiles, and Mixed Textiles).	Printing, Publishing, and Bookbinding.
Carriages and Wagons.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Chemical Preparations, Compounded (including Fertilizers).	Scientific Instruments and Appliances.
Cooking, Lighting, and Heating Apparatus.	Shipbuilding (including Awnings, Tents, and Decorations).
Cordage and Twine.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Sporting and Athletic Goods.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Stone.
Fancy Articles (including Fine Arts and Taxidermy).	Tallow, Candles, Soap, and Grease.
Food Preparations (including Salt).	Toys and Games (Children's).
Gas and Residual Products.	Trunks and Valises.
Hair Work (Animal and Human).	Whips, Lashes, and Stocks.
Hosiery and Knit Goods.	
Ivory, Bone, Shell, and Horn Goods, etc.	

*100 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

The industries with the greatest proportional amount of invested capital paying a profit are: Whips, Lashes, and Stocks, 99.65 per cent; Hair Work (Animal and Human), 99.99 per cent; and Charcoal and Kindlers (including Fireworks and Matches), Glass, and Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.), each with 100 per cent of capital represented making a profit. The industries with the smallest amount of invested capital paying a profit are: Flux, Hemp, and Jute Goods (including Linen),



52.76 per cent; Print Works, Dye Works, and Bleacheries, 52.32 per cent; and Oils and Illuminating Fluids, 34.42 per cent.

### CAPITAL REPRESENTED NOT MAKING A PROFIT.

The classification of percentages and the number of industries belonging to each classification are first given:

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	38
10 but under 20 per cent, . . . . .	14
20 but under 30 per cent, . . . . .	5
30 but under 40 per cent, . . . . .	1
40 but under 50 per cent, . . . . .	2
50 but under 70 per cent, . . . . .	1
No percentage not making a profit, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

Under their appropriate percentage heads, we next present the industries by name in text-tabular form.

#### *Under 10 per cent.*

Artisans' Tools.	Fancy Articles (including Fine Arts and Taxidermy).
Boots and Shoes.	Food Preparations (including Salt).
Boxes (Paper and Wooden).	Gas and Residual Products.
Brick, Tiles, and Sewer Pipe.	Hair Work (Animal and Human).
Brooms, Brushes, and Mops.	Hosiery and Knit Goods.
Building (including Concrete Walks, Paving, etc.).	Ivory, Bone, Shell, and Horn Goods, etc.
Burial Cases, Caskets, Coffins, etc.	Liquors and Beverages (Not Spirituous).
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Liquors: Malt, Distilled, and Fermented.
Carriages and Wagons.	Metals and Metallic Goods (including Clocks and Watches).
Chemical Preparations, Compounded (including Fertilizers).	Models and Patterns.
Cooking, Lighting, and Heating Apparatus.	Musical Instruments and Materials.
Cordage and Twine.	Photographs and Photographic Materials.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	

*Under 10 per cent — Concluded.*

Printing, Publishing, and Bookbinding.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).	Sporting and Athletic Goods.
Scientific Instruments and Appliances.	Stone.
Shipbuilding (including Awnings, Tents, and Decorations).	Tallow, Candles, Soap, and Grease.
	Toys and Games (Children's).
	Trunks and Valises.
	Whips, Lashes, and Stocks.

*10 per cent but under 20 per cent.*

Arms and Ammunition.	Paper and Paper Goods.
Artificial Teeth and Dental Work.	Railroad Construction and Equipment.
Clothing.	Tobacco, Snuff, and Cigars.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Wooden Goods (including Corks, Bungs, and Taps).
Furniture.	Woollen Goods.
Leather.	Worsted Goods.
Lumber.	
Paints, Colors, and Crude Chemicals (including Dyestuffs).	

*20 per cent but under 30 per cent.*

Agricultural Implements.	Glue, Isinglass, and Starch.
Electrical Apparatus and Appliances.	Machines and Machinery.
	Straw and Palm Leaf Goods.

*30 per cent but under 40 per cent.*

Cotton Goods.

*40 per cent but under 50 per cent.*

Flax, Hemp, and Jute Goods (including Linen).	Print Works, Dye Works, and Bleacheries.
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*60 per cent but under 70 per cent.*

Oils and Illuminating Fluids.

*No percentage not making a profit.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

The three industries in which the greatest proportional amount of invested capital does not pay a profit are: Flax, Hemp, and Jute Goods (including Linen), 47.24 per cent; Print Works, Dye Works, and Bleacheries, 47.68 per cent; Oils and Illuminating Fluids, 65.58 per cent. In three

industries all of the establishments made a profit. These are the three previously enumerated under the heading "No percentage not making a profit." In each of the other industries there is found a certain percentage of establishments not making a profit. The three industries in which the proportion of non-profit paying capital is very small are: Cordage and Twine, 0.41 per cent; Whips, Lashes, and Stocks, 0.35 per cent; and Hair Work (Animal and Human), 0.01 per cent.

For a final table in the consideration of this division of the subject we present one made up in the same form as the "Capital Invested, All Industries" aggregation on page 416, *ante*. It varies from the one referred to in the fact that the establishments not reporting and the capital not represented as regards profits are omitted therefrom.

## CAPITAL REPRESENTED. ALL INDUSTRIES.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Amount of Capital Invested	PERCENTAGES	
			Estab-lishments	Capital Invested
Making a profit, . . . . .	9,251	\$306,791,926	92.39	81.22
Not making a profit, . . . . .	762	70,919,878	7.61	18.78
TOTALS, . . . . .	10,013	\$377,711,804	100.00	100.00

Of 10,013 establishments reporting as regards profits there were 9,251, or 92.39 per cent, that paid a profit, while 762, or 7.61 per cent, did not pay a profit. Considering capital

## RECAPITULATION. CLASSIFIED CAPITAL. PERCENTAGES.

INDUSTRIES.	DETAILS OF CAPITAL INVESTED			
	Land	Buildings and Fixtures	Machinery	Imple-ments and Tools
1 Agricultural implements, . . . . .	4.78	20.28	8.25	0.82
2 Arms and ammunition, . . . . .	17.90	24.48	25.10	10.03
3 Artificial teeth and dental work, . . . . .	0.22	7.53	7.99	61.74
4 Artisans' tools, . . . . .	9.58	16.16	22.28	8.23
5 Boots and shoes, . . . . .	2.61	9.49	13.16	2.03
6 Boxes (paper and wooden), . . . . .	11.66	19.98	17.83	2.33
7 Brick, tiles, and sewer pipe, . . . . .	35.29	12.20	6.92	2.93
8 Brooms, brushes, and mops, . . . . .	8.69	17.25	5.84	1.69
9 Building (including concrete walks, paving, etc.), . . . . .	8.95	15.59	5.17	9.12

represented as regards profits, we find of \$377,711,804 of capital represented that \$306,791,926, or 81.22 per cent, paid a profit, while \$70,919,878, or 18.78 per cent, did not pay a profit.

As the percentage of capital represented not paying a profit is more than twice as large as the percentage of establishments reporting not paying a profit, it may be considered as conclusive that the establishments not making a profit were, as a rule, relatively larger than those of the other class. This fact is made more patent when we consider average capital invested; the average capital invested of the 9,251 establishments making a profit being \$33,163 while the average capital invested of the 762 establishments not making a profit is \$93,071.

### CLASSIFIED CAPITAL.

The second table in each of the industry presentations is devoted to a classification of capital invested. The various elements have been mentioned in detail in the introduction to this Part and they all appear as column heads in the next table. Numbers are not used in the table but their equivalent percentages take their place. All the manufacturing and mechanical establishments in operation in the Commonwealth in the Census year 1885, or 23,431, are included in the next table, which in addition to the details of capital invested, also contains a classified summary in which the details are given in a condensed form.

RECAPITULATION. CLASSIFIED CAPITAL. PERCENTAGES.

DETAILS OF CAPITAL INVESTED			CLASSIFIED SUMMARY				
Cash Capital	Credit Capital supplied by Partners or Stockholders	Credit Capital (Bills Payable, Accounts on long time, etc.)	Land, Buildings, and Fixtures	Machinery, Implements, and Tools	Cash Capital	Credit Capital	
37.04	2.64	26.19	25.06	9.07	37.04	28.83	1
13.00	4.54	4.95	42.38	35.13	13.00	9.49	2
22.24	-	0.28	7.75	69.73	22.24	0.28	3
36.21	1.62	5.90	25.74	30.53	36.21	7.52	4
59.32	3.64	9.85	12.10	15.19	59.32	13.39	5
36.36	1.48	10.36	31.64	20.16	36.36	11.84	6
24.01	6.10	12.55	47.49	9.85	24.01	18.65	7
52.12	6.68	7.73	25.94	7.53	52.12	14.41	8
45.58	3.99	11.60	24.54	14.29	45.58	15.59	9

*Recapitulation. Classified Capital. Percentages — Continued.*

	INDUSTRIES.	DETAILS OF CAPITAL INVESTED			
		Land	Buildings and Fixtures	Machinery	Implements and Tools
1	Burial cases, caskets, coffins, etc., . . . . .	11.05	29.61	7.54	5.44
2	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	6.60	16.72	24.11	0.32
3	Carriages and wagons, . . . . .	10.34	22.51	5.20	5.74
4	Charcoal and kindlers (including fireworks and matches), . . . . .	9.47	14.06	24.64	8.6
5	Chemical preparations, compounded (including fertilizers), . . . . .	4.11	8.81	9.60	0.45
6	Clothing, . . . . .	1.12	4.36	5.78	1.17
7	Cooking, lighting, and heating apparatus, . . . . .	5.37	16.09	6.12	6.71
8	Cordage and twine, . . . . .	9.89	12.23	23.11	0.63
9	Cotton goods, . . . . .	5.42	19.41	31.82	0.42
10	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	1.91	8.68	4.39	8.74
11	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	10.47	27.51	8.85	3.57
12	Electrical apparatus and appliances, . . . . .	3.53	12.02	41.58	2.49
13	Electroplating (including jewelry burnishing and lapidary work), . . . . .	0.88	4.53	26.01	15.22
14	Fancy articles (including fine arts and taxidermy), . . . . .	0.48	3.18	10.39	9.48
15	Flax, hemp, and jute goods (including linen), . . . . .	5.50	20.99	19.38	0.52
16	Food preparations (including salt), . . . . .	9.48	25.05	9.29	3.81
17	Furniture, . . . . .	5.07	12.29	8.00	1.79
18	Gas and residual products, . . . . .	19.92	29.74	31.51	4.56
19	Glass, . . . . .	12.26	24.65	3.48	3.11
20	Glue, isinglass, and starch, . . . . .	7.51	19.53	7.83	2.94
21	Hair work (animal and human), . . . . .	3.41	9.87	10.90	19.23
22	Hosiery and knit goods, . . . . .	4.49	13.19	24.09	0.64
23	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	7.00	18.62	19.06	6.11
24	Ivory, bone, shell, and horn goods, etc., . . . . .	3.04	10.88	16.35	19.62
25	Leather, . . . . .	5.43	12.02	7.93	2.35
26	Liquors and beverages (not spirituous), . . . . .	5.60	14.13	25.32	7.23
27	Liquors: malt, distilled, and fermented, . . . . .	12.65	29.10	15.66	4.56
28	Lumber, . . . . .	13.33	21.25	19.25	2.57
29	Machines and machinery, . . . . .	6.79	15.89	19.94	5.57
30	Metals and metallic goods (including clocks and watches), . . . . .	6.40	13.49	15.10	4.47
31	Models and patterns, . . . . .	0.66	4.36	30.47	19.73
32	Musical instruments and materials, . . . . .	11.05	19.22	9.02	2.40
33	Oils and illuminating fluids, . . . . .	15.14	13.62	7.86	2.79
34	Paints, colors, and crude chemicals (including dyestuffs), . . . . .	6.72	16.34	14.77	1.28
35	Paper and paper goods, . . . . .	6.53	22.88	23.25	0.84
36	Photographs and photographic materials, . . . . .	0.55	15.63	3.96	31.51
37	Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	4.49	15.31	7.72	2.77
38	Printing, publishing, and bookbinding, . . . . .	3.16	6.65	26.97	19.81

*Recapitulation. Classified Capital. Percentages — Continued.*

DETAILS OF CAPITAL INVESTED			CLASSIFIED SUMMARY				
Cash Capital	Credit Capital supplied by Partners or Stockholders	Credit Capital (Bills Payable, Accounts on long time, etc.)	Land, Buildings, and Fixtures	Machinery, Implements, and Tools	Cash Capital	Credit Capital	
40.33	-	6.03	40.66	12.98	40.33	6.03	1
27.58	5.50	18.97	23.32	24.63	27.58	24.47	2
45.64	3.12	7.45	32.85	10.94	45.64	10.57	3
43.22	-	-	23.53	33.25	43.22	-	4
56.61	7.24	13.20	12.92	10.03	56.61	20.44	5
69.08	3.96	14.53	5.48	6.95	69.08	18.49	6
41.79	11.63	12.29	21.46	12.83	41.79	23.92	7
37.66	1.67	14.81	22.12	23.74	37.66	16.48	8
19.87	1.11	21.75	24.83	32.44	19.87	22.86	9
68.77	2.12	5.39	10.59	13.13	68.77	7.51	10
33.71	6.25	9.70	37.98	12.36	33.71	15.95	11
26.46	8.93	4.99	15.55	44.07	26.46	13.92	12
49.48	-	0.88	5.41	44.23	49.48	0.88	13
75.04	-	1.43	3.66	19.87	75.04	1.43	14
26.81	6.82	20.41	26.49	19.77	26.81	26.93	15
44.38	0.57	7.42	34.53	13.10	44.38	7.99	16
61.05	3.34	8.55	17.36	9.70	61.05	11.89	17
9.00	0.94	4.03	49.66	36.37	9.00	4.97	18
50.44	-	6.06	38.91	6.59	50.44	6.06	19
56.04	2.57	3.58	27.04	10.77	56.04	6.15	20
11.61	33.12	11.84	13.28	30.15	11.61	44.96	21
29.80	2.45	24.74	17.68	25.33	29.80	27.19	22
34.47	2.35	12.39	25.62	25.17	34.47	14.74	23
20.36	12.86	25.85	13.92	27.01	20.36	38.71	24
54.01	3.49	14.77	17.45	10.28	54.01	18.26	25
41.19	2.82	3.71	19.73	32.55	41.19	6.53	26
31.69	-	6.02	41.75	20.54	31.69	6.02	27
36.57	0.58	6.45	34.58	21.82	36.57	7.03	28
39.10	2.55	10.16	22.68	25.51	39.10	12.71	29
42.27	7.86	10.81	19.89	19.17	42.27	18.67	30
39.42	-	5.36	5.02	50.20	39.42	5.36	31
39.37	0.21	18.73	30.27	11.42	39.37	18.94	32
35.95	14.24	10.50	28.76	10.55	35.95	24.74	33
42.28	7.52	11.11	23.06	16.03	42.28	18.63	34
30.56	4.01	12.43	28.91	24.09	30.56	16.44	35
46.55	-	1.65	16.23	35.57	46.55	1.65	36
57.61	3.10	9.06	19.80	10.43	57.61	12.16	37
29.05	0.61	13.75	9.81	46.78	29.05	14.36	38

*Recapitulation. Classified Capital. Percentages — Concluded.*

	INDUSTRIES.	DETAILS OF CAPITAL INVESTED			
		Land	Buildings and Fixtures	Machinery	Implements and Tools
1	Print works, dye works, and bleacheries, . . .	7.90	20.29	21.55	0.65
2	Railroad construction and equipment, . . .	25.18	25.01	17.56	2.06
3	Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	3.87	11.08	15.78	1.33
4	Scientific instruments and appliances, . . .	2.96	8.87	15.72	6.81
5	Shipbuilding (including awnings, tents, and decorations), . . . . .	13.13	12.36	8.73	7.85
6	Silk and silk goods (including buttons and dress trimmings), . . . . .	4.47	13.53	16.74	0.83
7	Sporting and athletic goods, . . . . .	7.79	13.67	15.89	5.70
8	Stone, . . . . .	26.32	14.94	10.37	6.14
9	Straw and palm leaf goods, . . . . .	2.99	16.13	15.47	2.07
10	Tallow, candles, soap, and grease, . . . . .	9.87	22.89	7.95	2.89
11	Tobacco, snuff, and cigars, . . . . .	1.21	7.07	1.85	3.64
12	Toys and games (children's), . . . . .	4.05	18.90	15.37	2.18
13	Trunks and valises, . . . . .	-	4.90	4.98	2.86
14	Whips, lashes, and stocks, . . . . .	3.40	5.43	15.66	0.87
15	Wooden goods (including corks, bungs, and taps), . . . . .	10.81	15.20	17.48	4.17
16	Woollen goods, . . . . .	5.77	17.48	20.40	0.61
17	Worsted goods, . . . . .	5.36	13.97	23.68	0.85

For a complete analysis of the preceding table it becomes necessary to consider by itself each detail of capital invested. This is done hereinafter, the plan of statistical treatment being to present, first, a classification of percentages with the number of industries belonging in each classification; second, a tabular presentation of each industry under its appropriate classification; and, third, a specification of those industries having a very high or very low proportion of capital invested in the particular detail under consideration.

## LAND.

We first deal with the proportional amounts of capital invested in land.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	47
10 but under 20 per cent, . . . . .	13
20 but under 30 per cent, . . . . .	2
30 but under 40 per cent, . . . . .	1
No percentage invested in land, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

*Recapitulation. Classified Capital. Percentages — Concluded.*

DETAILS OF CAPITAL INVESTED			CLASSIFIED SUMMARY				
Cash Capital	Credit Capital supplied by Partners or Stockholders	Credit Capital (Bills Payable, Accounts on long time, etc.)	Land, Buildings, and Fixtures	Machinery, Implements, and Tools	Cash Capital	Credit Capital	
18.89	9.24	21.48	28.19	22.20	18.89	30.72	1
17.08	-	12.51	50.19	20.22	17.08	12.51	2
32.11	27.59	8.24	14.95	17.11	32.11	35.83	3
58.38	2.48	4.78	11.83	22.53	58.38	7.26	4
52.11	1.32	4.50	25.49	16.58	52.11	5.82	5
36.64	2.69	25.10	18.00	17.57	36.64	27.79	6
45.44	2.79	8.72	21.46	21.59	45.44	11.51	7
36.53	1.23	4.47	41.26	16.51	36.53	5.70	8
34.71	3.16	25.47	19.12	17.54	34.71	28.63	9
38.71	7.41	10.28	32.76	10.84	38.71	17.69	10
67.54	4.62	14.07	8.28	5.49	67.54	18.69	11
43.53	2.70	13.37	22.85	17.55	43.53	16.07	12
77.00	-	10.26	4.90	7.84	77.00	10.26	13
55.73	11.79	7.12	8.83	16.53	55.73	18.91	14
41.21	0.52	10.61	26.01	21.65	41.21	11.18	15
34.88	5.08	15.78	23.25	21.01	34.88	20.86	16
23.54	2.10	30.50	19.33	24.53	23.54	32.60	17

The distribution of industries in accordance with the above percentage classification is as follows :

*Under 10 per cent.*

Agricultural Implements.	Drugs and Medicines (including
Artificial Teeth and Dental Work.	Perfumes, Toilet Articles, etc.).
Artisans' Tools.	Electrical Apparatus and Appli-
Boots and Shoes.	ances.
Brooms, Brushes, and Mops.	Electroplating (including Jewelry
Building (including Concrete Walks,	Burnishing and Lapidary Work).
Paving, etc.).	Fancy Articles (including Fine Arts
Carpetings (including Cotton, Wool-	and Taxidermy).
len, and Other Textiles, and Mixed	Flax, Hemp, and Jute Goods (includ-
Textiles).	ing Linen).
Charcoal and Kindlers (including	Food Preparations (including Salt).
Fireworks and Matches).	Furniture.
Chemical Preparations, Compounded	Glue, Isinglass, and Starch.
(including Fertilizers).	Hair Work (Animal and Human).
Clothing.	Hosiery and Knit Goods.
Cooking, Lighting, and Heating Ap-	Ink, Mucilage, and Paste (including
paratus.	Crayons, Pencils, Crucibles, etc.).
Cordage and Twine.	Ivory, Bone, Shell, and Horn Goods,
Cotton Goods.	etc.



*Under 10 per cent — Concluded.*

Leather.	Print Works, Dye Works, and Bleacheries.
Liquors and Beverages (Not Spirituous).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Machines and Machinery.	Scientific Instruments and Appliances.
Metals and Metallic Goods (including Clocks and Watches).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Models and Patterns.	Sporting and Athletic Goods.
Paints, Colors, and Crude Chemicals (including Dyestuffs).	Straw and Palm Leaf Goods.
Paper and Paper Goods.	Tallow, Candles, Soap, and Grease.
Photographs and Photographic Materials.	Tobacco, Snuff, and Cigars.
Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).	Toys and Games (Children's).
Printing, Publishing, and Bookbinding.	Whips, Lashes, and Stocks.
	Woollen Goods.
	Worsted Goods.

*10 per cent but under 20 per cent.*

Arms and Ammunition.	Liquors: Malt, Distilled, and Fermented.
Boxes (Paper and Wooden).	Lumber.
Burial Cases, Caskets, Coffins, etc.	Musical Instruments and Materials.
Carriages and Wagons.	Oils and Illuminating Fluids.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Shipbuilding (including Awnings, Tents, and Decorations).
Gas and Residual Products.	Wooden Goods (including Corks, Bungs, and Taps).
Glass.	

*20 per cent but under 30 per cent.*

Railroad Construction and Equipment.	Stone.
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*30 per cent but under 40 per cent.*

Brick, Tiles, and Sewer Pipe.

*No percentage invested in land.*

Trunks and Valises.

The greatest proportion of capital invested in land is shown by the following industries: Railroad Construction and Equipment, 25.18 per cent; Stone, 26.32 per cent; and Brick, Tiles, and Sewer Pipe, 35.29 per cent. One industry has no capital invested in land. The three industries with the smallest proportion of capital invested in land are: Photographs and Photographic Materials, 0.55 per cent; Fancy Articles (including Fine Arts and Taxidermy), 0.48 per cent; and Artificial Teeth and Dental Work, 0.22 per cent.

## BUILDINGS AND FIXTURES.

In the percentage table under Land we see that but three industries had 20 or more per cent of their working capital invested in land. The table which follows shows that 15 industries have between 20 and 30 per cent of their working capital invested in buildings and fixtures :

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	14
10 but under 20 per cent, . . . . .	35
20 but under 30 per cent, . . . . .	15
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A classification of the industries by name under their proper percentage heads is next given.

*Under 10 per cent.*

Artificial Teeth and Dental Work.	Hair Work (Animal and Human).
Boots and Shoes.	Models and Patterns.
Chemical Preparations, Compounded (including Fertilizers).	Printing, Publishing, and Bookbind- ing.
Clothing.	Scientific Instruments and Appli- ances.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Tobacco, Snuff, and Cigars.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Trunks and Valises.
Fancy Articles (including Fine Arts and Taxidermy).	Whips, Lashes, and Stocks.

*10 per cent but under 20 per cent.*

Artisans' Tools.	Electrical Apparatus and Appli- ances.
Boxes (Paper and Wooden).	Furniture.
Brick, Tiles, and Sewer Pipe.	Glue, Isinglass, and Starch.
Brooms, Brushes, and Mops.	Hosiery and Knit Goods.
Building (including Concrete Walks, Paving, etc.).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Ivory, Bone, Shell, and Horn Goods, etc.
Charcoal and Kindlers (including Fireworks and Matches).	Leather.
Cooking, Lighting, and Heating Ap- paratus.	Liquors and Beverages (Not Spirit- uous).
Cordage and Twine.	Machines and Machinery.
Cotton Goods.	Metals and Metallic Goods (includ- ing Clocks and Watches).

*10 per cent but under 20 per cent — Concluded.*

Musical Instruments and Materials.	Shipbuilding (including Awnings, Tents, and Decorations).
Oils and Illuminating Fluids.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Paints, Colors, and Crude Chemicals (including Dyestuffs).	Sporting and Athletic Goods.
Photographs and Photographic Materials.	Stone.
Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).	Straw and Palm Leaf Goods.
Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).	Toys and Games (Children's).
	Wooden Goods (including Corks, Bungs, and Taps).
	Woollen Goods.
	Worsted Goods.

*20 per cent but under 30 per cent.*

Agricultural Implements.	Glass.
Arms and Ammunition.	Liquors: Malt, Distilled, and Fermented.
Burial Cases, Caskets, Coffins, etc.	Lumber.
Carriages and Wagons.	Paper and Paper Goods.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Print Works, Dye Works, and Bleacheries.
Flax, Hemp, and Jute Goods (including Linen).	Railroad Construction and Equipment.
Food Preparations (including Salt).	Tallow, Candles, Soap, and Grease.
Gas and Residual Products.	

The industries having the greatest proportion of their working capital invested in buildings and fixtures are: Liquors: Malt, Distilled, and Fermented, 29.10 per cent; Burial Cases, Caskets, Coffins, etc., 29.61 per cent; Gas and Residual Products, 29.74 per cent. On the other hand, the smallest proportion is shown in Electroplating (including Jewelry Burnishing and Lapidary Work) with 4.53 per cent; Clothing, and Models and Patterns, each with 4.36 per cent; and Fancy Articles (including Fine Arts and Taxidermy), 3.18 per cent.

**MACHINERY.**

The next detail of capital invested is Machinery, that factor which has such a potent influence in developing the manufacturing powers of the Commonwealth. The following percentage classification shows that but 17 industries out of 64 have 20 or more per cent of their working capital invested in machinery:

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	25
10 but under 20 per cent, . . . . .	22
20 but under 30 per cent, . . . . .	13
30 but under 40 per cent, . . . . .	3
40 but under 50 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A text-tabular arrangement under percentage heads is sub-joined.

*Under 10 per cent.*

Agricultural Implements.	Food Preparations (including Salt).
Artificial Teeth and Dental Work.	Furniture.
Brick, Tiles, and Sewer Pipe.	Glass.
Brooms, Brushes, and Mops.	Glue, Isinglass, and Starch.
Building (including Concrete Walks, Paving, etc.).	Leather.
Burial Cases, Caskets, Coffins, etc.	Musical Instruments and Materials.
Carriages and Wagons.	Oils and Illuminating Fluids.
Chemical Preparations, Compounded (including Fertilizers).	Photographs and Photographic Materials.
Clothing.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Cooking, Lighting, and Heating Apparatus.	Shipbuilding (including Awnings, Tents, and Decorations).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Tallow, Candles, Soap, and Grease.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Tobacco, Snuff, and Cigars.
	Trunks and Valises.

*10 per cent but under 20 per cent.*

Boots and Shoes.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Boxes (Paper and Wooden).	Railroad Construction and Equipment.
Fancy Articles (including Fine Arts and Taxidermy).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Flax, Hemp, and Jute Goods (including Linen).	Scientific Instruments and Appliances.
Hair Work (Animal and Human).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Sporting and Athletic Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	Stone.
Liquors: Malt, Distilled, and Fermented.	Straw and Palm Leaf Goods.
Lumber.	Toys and Games (Children's).
Machines and Machinery.	Whips, Lashes, and Stocks.
Metals and Metallic Goods (including Clocks and Watches).	Wooden Goods (including Corks, Bungs, and Taps).

*20 per cent but under 30 per cent.*

Arms and Ammunition.	Hosiery and Knit Goods.
Artisans' Tools.	Liquors and Beverages (Not Spirituous).
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Paper and Paper Goods.
Charcoal and Kindlers (including Fireworks and Matches).	Printing, Publishing, and Bookbind- ing.
Cordage and Twine.	Print Works, Dye Works, and Bleach- eries.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Woollen Goods.
	Worsted Goods.

*30 per cent but under 40 per cent.*

Cotton Goods.	Models and Patterns.
Gas and Residual Products.	

*40 per cent but under 50 per cent.*

Electrical Apparatus and Appliances.

Gas and Residual Products has 31.51 per cent of its working capital invested in machinery; Cotton Goods, 31.82 per cent; and Electrical Apparatus and Appliances, 41.58 per cent. The industries having the least proportion of working capital invested in machinery are: Photographs and Photographic Materials, 3.96 per cent; Glass, 3.48 per cent; and Tobacco, Snuff, and Cigars, 1.85 per cent.

## IMPLEMENTS AND TOOLS.

The introduction of machinery into manufacturing industries has displaced the manual worker, or the handler of tools or implements, to a great extent, but, even in the industries having large machinery plants the percentage of working capital invested in implements and tools reaches, comparatively, a high figure. The classification by percentages is first given.

CLASSIFICATION OF PERCENTAGES.		Number of Industries
Under 10 per cent,	.	56
10 but under 20 per cent,	.	6
20 but under 30 per cent,	.	1
30 but under 40 per cent,	.	1
40 but under 50 per cent,	.	
WHOLE NUMBER OF INDUSTRIES,		64

Next follows the arrangement under percentage heads :

*Under 10 per cent.*

Agricultural Implements.	Leather.
Artisans' Tools.	Liquors and Beverages (Not Spirituous).
Boots and Shoes.	Liquors: Malt, Distilled, and Fermented.
Boxes (Paper and Wooden).	Lumber.
Brick, Tiles, and Sewer Pipe.	Machines and Machinery.
Brooms, Brushes, and Mops.	Metals and Metallic Goods (including Clocks and Watches).
Building (including Concrete Walks, Paving, etc.).	Musical Instruments and Materials.
Burial Cases, Caskets, Coffins, etc.	Oils and Illuminating Fluids.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Carriages and Wagons.	Paper and Paper Goods.
Charcoal and Kindlers (including Fireworks and Matches).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Chemical Preparations, Compounded (including Fertilizers).	Print Works, Dye Works, and Bleacheries.
Clothing.	Railroad Construction and Equipment.
Cooking, Lighting, and Heating Apparatus.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Cordage and Twine.	Scientific Instruments and Appliances.
Cotton Goods.	Shipbuilding (including Awnings, Tents, and Decorations).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Sporting and Athletic Goods.
Electrical Apparatus and Appliances.	Stone.
Fancy Articles (including Fine Arts and Taxidermy).	Straw and Palm Leaf Goods.
Flax, Hemp, and Jute Goods (including Linen).	Tallow, Candles, Soap, and Grease.
Food Preparations (including Salt).	Tobacco, Snuff, and Cigars.
Furniture.	Toys and Games (Children's).
Gas and Residual Products.	Trunks and Valises.
Glass.	Whips, Lashes, and Stocks.
Glue, Isinglass, and Starch.	Wooden Goods (including Corks, Bunges, and Taps).
Hosiery and Knit Goods.	Woollen Goods.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Worsted Goods.

*10 per cent but under 20 per cent.*

Arms and Ammunition.	Ivory, Bone, Shell, and Horn Goods, etc.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Models and Patterns.
Hair Work (Animal and Human).	Printing, Publishing, and Bookbinding.

*30 per cent but under 40 per cent.*

Photographs and Photographic Materials.

*60 per cent but under 70 per cent.*

Artificial Teeth and Dental Work.

Printing, Publishing, and Bookbinding, an industry in which machinery is largely used, has 19.81 per cent of its working capital invested in implements and tools, type being classed under this heading; Photographs and Photographic Materials, 31.61 per cent; and Artificial Teeth and Dental Work, 61.74 per cent. In Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles) but 0.52 per cent of the working capital is invested in implements and tools; in Chemical Preparations, Compounded (including Fertilizers), 0.43 per cent; in Flax, Hemp, and Jute Goods (including Linen), 0.39 per cent.

#### CASH CAPITAL.

The elements of capital invested so far considered, viz., land, buildings, fixtures, machinery, implements, and tools, form what is often termed the "plant." We next have to deal with money in its two forms of cash and credit. The respective proportions of the total capital invested consisting of cash, with the number of industries having the specified percentages of cash capital, are shown in the following table:

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	1
10 but under 20 per cent, . . . . .	5
20 but under 30 per cent, . . . . .	9
30 but under 40 per cent, . . . . .	19
40 but under 50 per cent, . . . . .	14
50 but under 60 per cent, . . . . .	10
60 but under 70 per cent, . . . . .	4
70 but under 80 per cent, . . . . .	2
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

We next classify the industries by name under their appropriate percentage heads.

*Under 10 per cent.*

## Gas and Residual Products.

*10 per cent but under 20 per cent.*

Arms and Ammunition.	Print Works, Dye Works, and Bleacheries.
Cotton Goods.	
Hair Work (Animal and Human).	Railroad Construction and Equipment.

*20 per cent but under 30 per cent.*

Artificial Teeth and Dental Work.	Hosiery and Knit Goods.
Brick, Tiles, and Sewer Pipe.	Ivory, Bone, Shell, and Horn Goods, etc.
Carpetings (including Cotton, Wool-len, and Other Textiles, and Mixed Textiles).	Printing, Publishing, and Bookbinding.
Electrical Apparatus and Appliances.	Worsted Goods.
Flax, Hemp, and Jute Goods (including Linen).	

*30 per cent but under 40 per cent.*

Agricultural Implements.	Models and Patterns.
Artisans' Tools.	Musical Instruments and Materials.
Boxes (Paper and Wooden).	Oils and Illuminating Fluids.
Cordage and Twine.	Paper and Paper Goods.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Liquors: Malt, Distilled, and Fermented.	Stone.
Lumber.	Straw and Palm Leaf Goods.
Machines and Machinery.	Tallow, Candles, Soap, and Grease.
	Woollen Goods.

*40 per cent but under 50 per cent.*

Building (including Concrete Walks, Paving, etc.).	Metals and Metallic Goods (including Clocks and Watches).
Burial Cases, Caskets, Coffins, etc.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Carriages and Wagons.	Photographs and Photographic Materials.
Charcoal and Kindlers (including Fireworks and Matches).	Sporting and Athletic Goods.
Cooking, Lighting, and Heating Apparatus.	Toys and Games (Children's).
Electroplating (including Jewelry Burnishing and Lapidary Work).	Wooden Goods (including Corks, Bunges, and Taps).
Food Preparations (including Salt).	
Liquors and Beverages (Not Spirituous).	



*50 per cent but under 60 per cent.*

Boots and Shoes.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Brooms, Brushes, and Mops.	Scientific Instruments and Appliances.
Chemical Preparations, Compounded (including Fertilizers).	Shipbuilding (including Awnings, Tents, and Decorations).
Glass.	Whips, Lashes, and Stocks.
Glue, Isinglass, and Starch.	
Leather.	

*60 per cent but under 70 per cent.*

Clothing.	Furniture.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Tobacco, Snuff, and Cigars.

*70 per cent but under 80 per cent.*

Fancy Articles (including Fine Arts and Taxidermy).	Trunks and Valises.
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The industries having the greatest proportion of their invested capital in the form of cash are: Clothing, 69.08 per cent; Fancy Articles (including Fine Arts and Taxidermy), 75.04 per cent; and Trunks and Valises, 77 per cent. The industries requiring the least proportional amount of cash capital, as compared with total capital invested, are: Arms and Ammunition, 13 per cent; Hair Work (Animal and Human), 11.61 per cent; and Gas and Residual Products, 9 per cent.

**CREDIT CAPITAL SUPPLIED BY PARTNERS OR STOCKHOLDERS.**

As in the case of "Cash Capital" we present, first, a percentage classification as regards industries.

CLASSIFICATION OF PERCENTAGES.		Number of Industries
Under 10 per cent,	.	47
10 but under 20 per cent,	.	4
20 but under 30 per cent,	.	1
30 but under 40 per cent,	.	1
No percentage of credit capital supplied by partners or stockholders,	.	11
WHOLE NUMBER OF INDUSTRIES,		64

The usual text-tabular classification is appended.

*Under 10 per cent.*

<b>Agricultural Implements.</b>	<b>Liquors and Beverages (Not Spirituous).</b>
<b>Arms and Ammunition.</b>	<b>Lumber.</b>
<b>Artisans' Tools.</b>	<b>Machines and Machinery.</b>
<b>Boots and Shoes.</b>	<b>Metals and Metallic Goods (including Clocks and Watches).</b>
<b>Boxes (Paper and Wooden).</b>	<b>Musical Instruments and Materials.</b>
<b>Brick, Tiles, and Sewer Pipe.</b>	<b>Paints, Colors, and Crude Chemicals (including Dyestuffs).</b>
<b>Brooms, Brushes, and Mops.</b>	<b>Paper and Paper Goods.</b>
<b>Building (including Concrete Walks, Paving, etc.).</b>	<b>Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).</b>
<b>Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).</b>	<b>Printing, Publishing, and Bookbinding.</b>
<b>Carriages and Wagons.</b>	<b>Print Works, Dye Works, and Bleacheries.</b>
<b>Chemical Preparations, Compounded (including Fertilizers).</b>	<b>Scientific Instruments and Appliances.</b>
<b>Clothing.</b>	<b>Shipbuilding (including Awnings, Tents, and Decorations).</b>
<b>Cordage and Twine.</b>	<b>Silk and Silk Goods (including Buttons and Dress Trimmings).</b>
<b>Cotton Goods.</b>	<b>Sporting and Athletic Goods.</b>
<b>Drugs and Medicines (including Perfumes, Toilet Articles, etc.).</b>	<b>Stone.</b>
<b>Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).</b>	<b>Straw and Palm Leaf Goods.</b>
<b>Electrical Apparatus and Appliances.</b>	<b>Tallow, Candles, Soap, and Grease.</b>
<b>Flax, Hemp, and Jute Goods (including Linen).</b>	<b>Tobacco, Snuff, and Cigars.</b>
<b>Food Preparations (including Salt).</b>	<b>Toys and Games (Children's).</b>
<b>Furniture.</b>	<b>Wooden Goods (including Corks, Bungs, and Taps).</b>
<b>Gas and Residual Products.</b>	<b>Woollen Goods.</b>
<b>Glue, Isinglass, and Starch.</b>	<b>Worsted Goods.</b>
<b>Hosiery and Knit Goods.</b>	
<b>Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).</b>	
<b>Leather.</b>	

*10 per cent but under 20 per cent.*

<b>Cooking, Lighting, and Heating Apparatus.</b>	<b>Oils and Illuminating Fluids.</b>
<b>Ivory, Bone, Shell, and Horn Goods, etc.</b>	<b>Whips, Lashes, and Stocks.</b>

*20 per cent but under 30 per cent.*

<b>Rubber and Elastic Goods (including Hose : Rubber, Linen, etc.).</b>
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*30 per cent but under 40 per cent.*

<b>Hair Work (Animal and Human).</b>
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*No percentage of credit capital supplied by partners or stockholders*

Artificial Teeth and Dental Work.	Glass.
Burial Cases, Caskets, Coffins, etc.	Liquors: Malt, Distilled, and Fermented.
Charcoal and Kindlers (including Fireworks and Matches).	Models and Patterns.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Photographs and Photographic Materials.
Fancy Articles (including Fine Arts and Taxidermy).	Railroad Construction and Equipment Trunks and Valises.

The industries making use of the greatest proportion of credit capital supplied by partners or stockholders are: Oil and Illuminating Fluids, 14.24 per cent; Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.), 27.59 per cent; Hair Work (Animal and Human), 33.12 per cent; that is, in this latter industry nearly one-third of the total capital invested is credit capital supplied by partners or stockholders. There are 11 industries in which no percentage of credit capital is supplied by partners or stockholders; that is, those industries do not borrow money from the sources mentioned to carry on business. Next to the 11 industries using no credit capital supplied by partners or stockholders are three industries with very small percentages, as follows: Food Preparations (including Salt), 0.57 per cent; Wooden Goods (including Corks, Bungs, and Taps), 0.52 per cent; and Musical Instruments and Materials, 0.21 per cent.

**CREDIT CAPITAL: BILLS PAYABLE, ACCOUNTS ON LONG TIME, ETC.**

The subjoined table shows the proportional aid, as compared with total capital invested, derived from the use of notes, long-standing accounts, etc., and brings the industries into line to conform to a percentage classification.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	29
10 but under 20 per cent, . . . . .	25
20 but under 30 per cent, . . . . .	8
30 but under 40 per cent, . . . . .	1
No percentage of credit capital derived from bills payable, accounts on long time, etc., . . . . .	1
<b>WHOLE NUMBER OF INDUSTRIES, . . . . .</b>	<b>64</b>

The industries are next brought by name under their proper percentage heads.

*Under 10 per cent.*

<b>Arms and Ammunition.</b>	Glue, Isinglass, and Starch.
<b>Artificial Teeth and Dental Work.</b>	Liquors and Beverages (Not Spirituous).
<b>Artisans' Tools.</b>	Liquors: Malt, Distilled, and Fermented.
<b>Boots and Shoes.</b>	Lumber.
<b>Brooms, Brushes, and Mops.</b>	Models and Patterns.
<b>Burial Cases, Caskets, Coffins, etc.</b>	Photographs and Photographic Materials.
<b>Carriages and Wagons.</b>	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
<b>Drugs and Medicines (including Perfumes, Toilet Articles, etc.).</b>	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
<b>Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).</b>	Scientific Instruments and Appliances.
<b>Electrical Apparatus and Appliances.</b>	Shipbuilding (including Awnings, Tents, and Decorations).
<b>Electroplating (including Jewelry Burnishing and Lapidary Work).</b>	Sporting and Athletic Goods.
<b>Fancy Articles (including Fine Arts and Taxidermy).</b>	Stone.
<b>Food Preparations (including Salt).</b>	Whips, Lashes, and Stocks.
<b>Furniture.</b>	
<b>Gas and Residual Products.</b>	
<b>Glass.</b>	

*10 per cent but under 20 per cent.*

<b>Boxes (Paper and Wooden).</b>	Metals and Metallic Goods (including Clocks and Watches).
<b>Brick, Tiles, and Sewer Pipe.</b>	Musical Instruments and Materials.
<b>Building (including Concrete Walks, Paving, etc.).</b>	Oils and Illuminating Fluids.
<b>Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).</b>	Paints, Colors, and Crude Chemicals (including Dyestuffs).
<b>Chemical Preparations, Compounded (including Fertilizers).</b>	Paper and Paper Goods.
<b>Clothing.</b>	Printing, Publishing, and Bookbinding.
<b>Cooking, Lighting, and Heating Apparatus.</b>	Railroad Construction and Equipment.
<b>Cordage and Twine.</b>	Tallow, Candles, Soap, and Grease.
<b>Hair Work (Animal and Human).</b>	Tobacco, Snuff, and Cigars.
<b>Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).</b>	Toys and Games (Children's).
<b>Leather.</b>	Trunks and Valises.
<b>Machines and Machinery.</b>	Wooden Goods (including Corks, Bungs, and Taps).
	Woollen Goods.

*20 per cent but under 30 per cent.*

Agricultural Implements.	Print Works, Dye Works, and Bleacheries.
Cotton Goods.	
Flax, Hemp, and Jute Goods (including Linen).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Hosiery and Knit Goods.	Straw and Palm Leaf Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	

*30 per cent but under 40 per cent.*

Worsted Goods.

*No percentage of credit capital derived from bills payable, accounts on long time, etc.*

Charcoal and Kindlers (including Fireworks and Matches).

The three industries depending to the greatest extent upon discounted notes or long-time purchases are: Ivory, Bone, Shell, and Horn Goods, etc., 25.85 per cent; Agricultural Implements, 26.19 per cent; and Worsted Goods, 30.50 per cent. One industry, Charcoal and Kindlers (including Fireworks and Matches), does not depend upon the form of credit capital under consideration for any part of its working capital. The three industries having the next lowest proportion are: Fancy Articles (including Fine Arts and Taxidermy), 1.43 per cent; Electroplating (including Jewelry Burnishing and Lapidary Work), 0.88 per cent; and Artificial Teeth and Dental Work, 0.28 per cent.

## CLASSIFIED SUMMARY.

An inspection of the "Classified Capital" tables given under each industry will show that the details of capital invested are, in the case of each industry, brought into a "Classified Summary." In this summary, Land is combined with Buildings and Fixtures; Machinery with Implements and Tools, and the two forms of Credit Capital are united. These combinations bring out new results as regards percentages and new arrangements in the text-tabular presentations. As these new results are as indicative and valuable as the details of "Classified Capital" the sections of the classified summary are given the same analytical treatment as the detail presentation. As "Cash Capital" is the same in the detail and summary presen-

tations, its consideration is omitted here and the reader is referred to page 442, *ante*.

The first section of the "Classified Summary" is —

### LAND, BUILDINGS, AND FIXTURES.

We first give the percentage classification as regards the 64 industries under consideration.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	9
10 but under 20 per cent, . . . . .	18
20 but under 30 per cent, . . . . .	22
30 but under 40 per cent, . . . . .	8
40 but under 50 per cent, . . . . .	6
50 but under 60 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

The arrangement of industries by name under percentage heads follows:

#### *Under 10 per cent.*

Artificial Teeth and Dental Work.	Models and Patterns.
Clothing.	Printing, Publishing, and Bookbinding.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Tobacco, Snuff, and Cigars.
Fancy Articles (including Fine Arts and Taxidermy).	Trunks and Valises.
	Whips, Lashes, and Stocks.

#### *10 per cent but under 20 per cent.*

Boots and Shoes.	Metals and Metallic Goods (including Clocks and Watches).
Chemical Preparations, Compounded (including Fertilizers).	Photographs and Photographic Materials.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Electrical Apparatus and Appliances.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Furniture.	Scientific Instruments and Appliances.
Hair Work (Animal and Human).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Hosiery and Knit Goods.	Straw and Palm Leaf Goods.
Ivory, Bone, Shell, and Horn Goods, etc.	Worsted Goods.
Leather.	
Liquors and Beverages (Not Spirituous).	

*20 per cent but under 30 per cent.*

Agricultural Implements.	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Artisans' Tools.	Machines and Machinery.
Brooms, Brushes, and Mops.	Oils and Illuminating Fluids.
Building (including Concrete Walks, Paving, etc.).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Carpetings (including Cotton, Wool-len, and Other Textiles, and Mixed Textiles).	Paper and Paper Goods.
Charcoal and Kindlers (including Fireworks and Matches).	Print Works, Dye Works, and Bleach-eries.
Cooking, Lighting, and Heating Ap-paratus.	Shipbuilding (including Awnings, Tents, and Decorations).
Cordage and Twine.	Sporting and Athletic Goods.
Cotton Goods.	Toys and Games (Children's).
Flax, Hemp, and Jute Goods (in-cluding Linen).	Wooden Goods (including Corks, Bunges, and Taps).
Glue, Isinglass, and Starch.	Woollen Goods.

*30 per cent but under 40 per cent.*

Boxes (Paper and Wooden).	Food Preparations (including Salt).
Carriages and Wagons.	Glass.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Lumber.
	Musical Instruments and Materials.
	Tallow, Candles, Soap, and Grease.

*40 per cent but under 50 per cent.*

Arms and Ammunition.	Liquors: Malt, Distilled, and Fer-mented.
Brick, Tiles, and Sewer Pipe.	Stone.
Burial Cases, Caskets, Coffins, etc.	
Gas and Residual Products.	

*50 per cent but under 60 per cent.*

Railroad Construction and Equipment.

The industries having the greatest proportion of their total capital invested in land, buildings, and fixtures are: Brick, Tiles, and Sewer Pipe, 47.49 per cent; Gas and Residual Products, 49.66 per cent; and Railroad Construction and Equipment, 50.19 per cent. The industries having the least proportion of total capital invested in these items of plant are: Models and Patterns, 5.02 per cent; Trunks and Valises, 4.90 per cent; and Fancy Articles (including Fine Arts and Taxi-dermy), 3.66 per cent.

## MACHINERY, IMPLEMENTS, AND TOOLS.

This is the second combination of the "Classified Summary." The first presentation places the industries in accordance with the customary percentage classification.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	8
10 but under 20 per cent, . . . . .	26
20 but under 30 per cent, . . . . .	17
30 but under 40 per cent, . . . . .	8
40 but under 50 per cent, . . . . .	3
50 but under 60 per cent, . . . . .	1
60 but under 70 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

An arrangement of the industries by name under the percentage classification heads is appended.

*Under 10 per cent.*

Agricultural Implements.	Furniture.
Brick, Tiles, and Sewer Pipe.	Glass.
Brooms, Brushes, and Mops.	Tobacco, Snuff, and Cigars.
Clothing.	Trunks and Valises.

*10 per cent but under 20 per cent.*

Boots and Shoes.	Leather.
Building (including Concrete Walks, Paving, etc.).	Metals and Metallic Goods (including Clocks and Watches).
Burial Cases, Caskets, Coffins, etc.	Musical Instruments and Materials.
Carriages and Wagons.	Oils and Illuminating Fluids.
Chemical Preparations, Compounded (including Fertilizers).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Cooking, Lighting, and Heating Apparatus.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Shipbuilding (including Awnings, Tents, and Decorations).
Fancy Articles (including Fine Arts and Taxidermy).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Flax, Hemp, and Jute Goods (including Linen).	Stone.
Food Preparations (including Salt).	Straw and Palm Leaf Goods.
Glue, Isinglass, and Starch.	Tallow, Candles, Soap, and Grease.
	Toys and Games (Children's).
	Whips, Lashes, and Stocks.



*20 per cent but under 30 per cent.*

Boxes (Paper and Wooden).	Machines and Machinery.
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Paper and Paper Goods.
Cordage and Twine.	Print Works, Dye Works, and Bleach- eries.
Hosiery and Knit Goods.	Railroad Construction and Equip- ment.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Scientific Instruments and Appli- ances.
Ivory, Bone, Shell, and Horn Goods, etc.	Sporting and Athletic Goods.
Liquors: Malt, Distilled, and Fer- mented.	Wooden Goods (including Corks, Bungs, and Taps).
Lumber.	Woollen Goods.
	Worsted Goods.

*30 per cent but under 40 per cent.*

Arms and Ammunition.	Hair Work (Animal and Human).
Artisans' Tools.	Liquors and Beverages (Not Spirit- uous).
Charcoal and Kindlers (including Fireworks and Matches).	Photographs and Photographic Ma- terials.
Cotton Goods.	
Gas and Residual Products.	

*40 per cent but under 50 per cent.*

Electrical Apparatus and Appliances.	Printing, Publishing, and Bookbind- ing.
Electroplating (including Jewelry Burnishing and Lapidary Work).	

*50 per cent but under 60 per cent.*

Models and Patterns.

*60 per cent but under 70 per cent.*

Artificial Teeth and Dental Work.

The industries having the greatest proportion of their total capital invested in machinery, implements, and tools are: Printing, Publishing, and Bookbinding, 46.78 per cent; Models and Patterns, 50.20 per cent; and Artificial Teeth and Dental Work, 69.73 per cent. The industries with the smallest proportion similarly invested are: Clothing, 6.95 per cent; Glass, 6.59 per cent; and Tobacco, Snuff, and Cigars, 5.49 per cent.

## CASH CAPITAL.

See classification of percentages, text-tabular arrangement of industries, and consideration on pages 442-444, *ante*, and reference on page 448, *ante*, to the omission of a duplicate presentation of this item of capital invested.

## CREDIT CAPITAL.

In this section of the "Classified Summary," the two forms of credit capital are combined. We obtain the following classification of industries by percentages of credit capital of total capital invested :

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	19
10 but under 20 per cent, . . . . .	28
20 but under 30 per cent, . . . . .	11
30 but under 40 per cent, . . . . .	4
40 but under 50 per cent, . . . . .	1
No percentage of credit capital, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A text-tabular arrangement of industries under their proper percentage heads follows :

*Under 10 per cent.*

Arms and Ammunition.  
Artificial Teeth and Dental Work.  
Artisans' Tools.  
Burial Cases, Caskets, Coffins, etc.  
Drugs and Medicines (including  
Perfumes, Toilet Articles, etc.).  
Electroplating (including Jewelry  
Burnishing and Lapidary Work).  
Fancy Articles (including Fine Arts  
and Taxidermy).  
Food Preparations (including Salt).  
Gas and Residual Products.  
Glass.  
Glue, Isinglass, and Starch.

Liquors and Beverages (Not Spirit-  
uous).  
Liquors: Malt, Distilled, and Fer-  
mented.  
Lumber.  
Models and Patterns.  
Photographs and Photographic Ma-  
terials.  
Scientific Instruments and Appli-  
ances.  
Shipbuilding (including Awnings,  
Tents, and Decorations).  
Stone.

*10 per cent but under 20 per cent.*

Boots and Shoes.	Musical Instruments and Materials.
Boxes (Paper and Wooden).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Brick, Tiles, and Sewer Pipe.	Paper and Paper Goods.
Brooms, Brushes, and Mops.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Building (including Concrete Walks, Paving, etc.).	Printing, Publishing, and Bookbinding.
Carriages and Wagons.	Railroad Construction and Equipment.
Clothing.	Sporting and Athletic Goods.
Cordage and Twine.	Tallow, Candles, Soap, and Grease.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Tobacco, Snuff, and Cigars.
Electrical Apparatus and Appliances.	Toys and Games (Children's).
Furniture.	Trunks and Valises.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Whips, Lashes, and Stocks.
Leather.	Wooden Goods (including Corks, Bunges, and Taps).
Machines and Machinery.	
Metals and Metallic Goods (including Clocks and Watches).	

*20 per cent but under 30 per cent.*

Agricultural Implements.	Flax, Hemp, and Jute Goods (including Linen).
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Hosiery and Knit Goods.
Chemical Preparations, Compounded (including Fertilizers).	Oils and Illuminating Fluids.
Cooking, Lighting, and Heating Apparatus.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Cotton Goods.	Straw and Palm Leaf Goods.
	Woollen Goods.

*30 per cent but under 40 per cent.*

Ivory, Bone, Shell, and Horn Goods, etc.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Print Works, Dye Works, and Bleacheries.	Worsted Goods.

*40 per cent but under 50 per cent.*

Hair Work (Animal and Human).

*No percentage of credit capital.*

Charcoal and Kindlers (including Fireworks and Matches).

The industries depending upon credit capital to the greatest extent are: Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.), 35.83 per cent; Ivory, Bone, Shell, and

Horn Goods, etc., 38.71 per cent; and Hair Work (Animal and Human), 44.96 per cent. Charcoal and Kindlers (including Fireworks and Matches) has no part of its invested capital in the form of credit capital. The three industries having the next smallest proportion of credit capital are: Fancy Articles (including Fine Arts and Taxidermy), 1.43 per cent; Electroplating (including Jewelry Burnishing and Lapidary Work), 0.88 per cent; and Artificial Teeth and Dental Work, 0.28 per cent.

### CLASSIFIED CAPITAL IN ALL INDUSTRIES.

We bring forward from page 398, *ante*, the "All Industries" table which shows the details of capital invested in 23,431 establishments, and also a "Classified Summary" of capital invested for the same establishments.

#### CLASSIFIED CAPITAL. ALL INDUSTRIES. [23,431 Establishments.]

DETAILS OF CAPITAL INVESTED.	Amounts	Percentages
Land, . . . . .	\$34,412,516	6.87
Buildings and fixtures, . . . . .	84,474,127	16.87
Machinery, . . . . .	100,955,619	20.17
Implements and tools, . . . . .	14,298,711	2.86
Cash capital, . . . . .	173,440,947	34.65
Supplied by partners or stockholders, . . . . .	19,481,405	3.89
Bills payable, accounts on long time, etc., . . . . .	73,531,052	14.69
<b>TOTAL, . . . . .</b>	<b>\$500,594,377</b>	<b>100.00</b>
<i>Classified Summary.</i>		
Land, buildings, and fixtures, . . . . .	\$118,886,643	23.74
Machinery, implements, and tools, . . . . .	115,254,330	23.03
Cash capital, . . . . .	173,440,947	34.65
Credit capital, . . . . .	93,012,467	18.58
<b>AGGREGATES, . . . . .</b>	<b>\$500,594,377</b>	<b>100.00</b>

This presentation supplies instructive and valuable information. It shows, at a glance, the various elements of capital required for the production of goods valued at nearly \$700,000,000, the specification of these elements being accompanied with amounts and percentages. Considering the detail portion of the table, we find, that out of a grand total of \$500,594,377 of capital invested in manufacturing and mechan-

ical industries in the Commonwealth, the Land represents an investment of \$34,412,516, or 6.87 per cent; Buildings and Fixtures require \$84,474,127, or 16.87 per cent; in Machinery \$100,955,619 are invested, forming 20.17 per cent of total capital invested; in Implements and Tools, \$14,298,711, or 2.86 per cent; Cash Capital amounts to \$173,440,947, or 34.65 per cent; Credit Capital supplied by partners or stockholders reaches \$19,481,405, or 3.89 per cent, while Credit Capital in the form of bills payable, accounts on long time, etc., amounts to \$73,531,052, or 14.69 per cent of the total capital invested. The "Classified Summary" of capital invested gives us new series of amounts and percentages. Land, Buildings, and Fixtures are valued at \$118,886,643, or 23.74 per cent of total capital invested; Machinery, Implements, and Tools, \$115,254,330, or 23.03 per cent; Cash Capital, as in the detail showing preceding, \$173,440,947, or 34.65 per cent; and Credit Capital, including both forms of same, \$93,012,457, or 18.58 per cent. In other words, a Massachusetts manufacturer, on the average, out of every \$100 invested, puts nearly \$24 into land, buildings, and fixtures, \$23 into machinery, implements, and tools, has about \$35 in cash for working capital, and borrows \$18 more to supplement his cash capital. He has \$47 out of every \$100 invested in his plant and with \$53 in cash or borrowed money he carries on his business. His margin of profit on this investment it is the province of this Part to show.

### SELLING PRICE.

Under "Capital Invested" we showed the respective percentages of establishments and invested capital making a profit, not making a profit, or not reporting as regards profits. The object of the tables headed "Selling Price," given for each industry, is to show the respective percentages of establishments and of selling price (value of goods made and work done) making a profit, not making a profit, or not reporting as regards profits. It will be seen that the two presentations are the same in form, the statistical variation being that selling price becomes the basis of determining profits instead of capital invested. As the columns for "Establishments" are the same in the two presentations, we omit all consideration of estab-

lishments here, calling attention to the analyses of the returns concerning them on pages 403-409, *ante*.

We present, first, a recapitulation drawn from the "Selling Price" tables, giving, respectively, the percentages of establishments and selling price making a profit, not making a profit, or not reporting as regards profits. The percentages for establishments, although the same as given previously under "Capital Invested," are repeated here simply to allow of ready comparison being made with the percentages, for selling price, or value of goods made and work done.

### RECAPITULATION. SELLING PRICE. PERCENTAGES.

INDUSTRIES.	ESTABLISHMENTS —			SELLING PRICE —		
	making a profit	not making a profit	not answer- ing	making a profit	not making a profit	not answer- ing
Agricultural implements, . . . . .	50.00	10.00	40.00	78.46	10.23	11.31
Arms and ammunition, . . . . .	47.50	7.50	45.00	62.93	5.50	31.57
Artificial teeth and dental work, . . . .	21.06	3.48	75.46	24.66	1.82	73.52
Artisans' tools, . . . . .	49.29	5.71	45.00	76.51	4.23	19.21
Boots and shoes, . . . . .	45.10	2.66	52.24	71.04	3.83	25.13
Boxes (paper and wooden), . . . . .	50.23	4.19	45.58	63.97	2.49	33.54
Brick, tiles, and sewer pipe, . . . . .	30.70	3.51	65.79	32.21	2.42	65.37
Brooms, brushes, and mops, . . . . .	40.28	8.33	51.39	74.66	2.54	22.80
Building (including concrete walks, paving, etc.), . . . . .	31.37	0.98	67.65	39.45	1.36	59.19
Burial cases, caskets, coffins, etc., . . .	25.66	1.77	72.57	60.44	0.84	38.72
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	39.68	7.94	52.38	69.00	4.39	26.61
Carriages and wagons, . . . . .	47.88	1.08	51.04	67.43	1.65	30.92
Charcoal and kindlers (including fireworks and matches), . . . . .	25.00	—	75.00	67.11	—	32.89
Chemical preparations, compounded (in- cluding fertilizers), . . . . .	50.00	15.00	35.00	87.12	4.48	8.40
Clothing, . . . . .	32.97	1.42	65.61	44.51	2.94	52.55
Cooking, lighting, and heating apparatus, .	46.15	4.62	49.23	59.32	1.77	38.91
Cordage and twine, . . . . .	63.46	5.77	30.77	88.46	0.27	11.27
Cotton goods, . . . . .	52.73	30.30	16.97	59.35	28.42	12.23
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	13.07	3.78	83.15	31.22	0.57	68.21
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . .	57.90	5.26	36.84	72.48	0.80	26.72
Electrical apparatus and appliances, . . .	52.50	7.50	40.00	39.92	4.78	55.30
Electroplating (including jewelry burnish- ing and lapidary work), . . . . .	66.67	7.14	26.19	80.86	4.81	14.33
Fancy articles (including fine arts and tax- idermy), . . . . .	36.58	2.44	60.98	59.03	3.23	37.74
Flax, hemp, and jute goods (including linen), . . . . .	58.33	16.67	25.00	57.01	28.53	14.46

*Recapitulation. Selling Price. Percentages — Concluded.*

INDUSTRIES.	ESTABLISHMENTS—			SELLING PRICE—		
	making a profit	not making a profit	not answer- ing	making a profit	not making a profit	not answer- ing
Food preparations (including salt), . . .	37.41	2.45	60.14	56.75	2.24	41.01
Furniture, . . . . .	44.61	5.80	49.59	60.45	10.26	29.29
Gas and residual products, . . . . .	48.48	4.55	46.97	65.40	0.50	34.10
Glass, . . . . .	60.00	—	40.00	51.80	—	48.20
Glue, isinglass, and starch, . . . . .	68.96	6.90	24.14	58.20	13.62	28.18
Hair work (animal and human), . . . .	38.18	1.82	60.00	79.75	—	20.25
Hosiery and knit goods, . . . . .	50.00	3.33	46.67	92.48	3.16	4.36
Ink, mucilage, and paste (including cray- ons, pencils, crucibles, etc.), . . . .	44.44	—	55.56	46.50	—	53.50
Ivory, bone, shell, and horn goods, etc., .	61.54	2.56	35.90	83.10	3.37	13.53
Leather, . . . . .	48.64	3.86	47.50	65.71	10.30	23.99
Liquors and beverages (not spirituous), .	38.09	1.59	60.32	37.56	0.78	61.66
Liquors: malt, distilled, and fermented, .	39.45	2.75	57.80	66.18	0.42	33.40
Lumber, . . . . .	40.77	5.80	53.43	48.52	4.19	47.29
Machines and machinery, . . . . .	59.00	5.63	35.37	65.66	6.76	27.56
Metals and metallic goods (including clocks and watches), . . . . .	38.00	3.31	58.69	64.81	4.24	30.95
Models and patterns, . . . . .	70.59	1.96	27.45	66.56	1.55	31.89
Musical instruments and materials, . . .	67.74	2.15	30.11	68.55	3.99	27.56
Oils and illuminating fluids, . . . . .	25.00	10.71	64.29	24.57	35.33	49.11
Paints, colors, and crude chemicals (includ- ing dyestuffs), . . . . .	51.61	6.45	41.94	65.45	8.57	25.98
Paper and paper goods, . . . . .	59.46	13.51	27.03	70.28	11.01	18.71
Photographs and photographic materials, .	45.23	2.49	52.28	58.40	1.51	40.09
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	39.74	6.41	53.85	56.36	2.95	40.69
Printing, publishing, and bookbinding, .	52.81	3.23	43.96	60.00	3.46	36.54
Print works, dye works, and bleacheries, .	57.29	10.42	32.29	42.00	39.56	15.44
Railroad construction and equipment, . .	40.00	26.67	33.33	43.12	12.11	44.77
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	50.00	6.82	43.18	67.10	4.11	28.79
Scientific instruments and appliances, . .	46.15	3.08	50.77	67.19	0.22	32.59
Shipbuilding (including awnings, tents, and decorations), . . . . .	39.93	2.73	57.34	38.98	1.53	59.49
Silk and silk goods (including buttons and dress trimmings), . . . . .	50.00	7.14	42.86	52.03	7.60	40.37
Sporting and athletic goods, . . . . .	44.45	3.70	51.85	15.80	0.56	83.64
Stone, . . . . .	48.68	2.38	48.94	69.56	4.44	26.00
Straw and palm leaf goods, . . . . .	34.04	6.38	59.58	52.70	7.13	40.12
Tallow, candles, soap, and grease, . . .	41.29	5.81	52.90	64.78	0.65	34.57
Tobacco, snuff, and cigars, . . . . .	36.76	4.30	58.94	59.37	8.22	32.41
Toys and games (children's), . . . . .	66.67	6.66	26.67	87.22	11.05	1.73
Trunks and valises, . . . . .	44.00	4.00	52.00	43.99	2.46	53.55
Whips, lashes, and stocks, . . . . .	41.67	1.66	56.67	56.21	0.01	43.78
Wooden goods (including corks, bungs, and taps), . . . . .	44.61	3.72	51.67	60.98	3.42	35.65
Woollen goods, . . . . .	61.37	13.23	25.40	76.13	8.39	15.48
Worsted goods, . . . . .	56.52	17.39	26.09	60.43	13.89	25.66

\* Less than one one-hundredth of one per cent.

## SELLING PRICE MAKING A PROFIT.

Throughout this analysis we have endeavored to be explicit even at some sacrifice of style. Tautology may be excused if it is necessary to set forth clearly the meaning of the tables. The expression "Selling price making a profit" may, perhaps, require explanation. It should be understood that by "selling price" is meant, for each industry, the total value of goods made and work done in all the establishments in that industry as enumerated in the Decennial Census of the Commonwealth taken in 1885. In other words, the "selling price" as used in the tables represents the gross pecuniary return to the establishments for the year. In the present report when this pecuniary return was sufficient to yield a profit the fact is noted under the expression "Selling price making a profit." When, on the other hand, the aggregate gross pecuniary return represented by the "selling price" was not large enough to yield a profit, the fact is noted under the expression "Selling price not making a profit." The following table shows the 64 industries aggregated under a percentage classification. The first line means that, in the case of one industry, 10 but under 20 per cent of the aggregate amount received for goods made and work done (selling price) was large enough to yield a profit.\* That is, in other words, from 10 but under 20 per cent of the selling price a profit was made or derived; on the difference between this per cent and 100 per cent either no profit was made or the selling price did not enter into this investigation for the reason that the establishments reporting it made no returns as to profits. The second line means that in two industries, on 20 but under 30 per cent of the selling price of all the goods made or work done in those industries a profit was made, the remaining percentage needed to make 100 per cent representing either selling price not making a profit, or selling price that did not enter into the investigation as to profits. The remaining lines in the subjoined table, and the analogous line in similar tables under "Selling Price" should be read and understood in a similar manner, the actual percentages being easily referred to in the table headed "Recapitulation. Selling Price. Percentages."

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\* For the reason, of course, that it was greater than the cost of production.



CLASSIFICATION OF PERCENTAGES.		Number of Industries
10 but under 20 per cent,	. . . . .	1
20 but under 30 per cent,	. . . . .	2
30 but under 40 per cent,	. . . . .	6
40 but under 50 per cent,	. . . . .	6
50 but under 60 per cent,	. . . . .	13
60 but under 70 per cent,	. . . . .	22
70 but under 80 per cent,	. . . . .	8
80 but under 90 per cent,	. . . . .	5
90 but under 100 per cent,	. . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

The various industries by name are next arranged under their appropriate percentage heads.

*10 per cent but under 20 per cent.*

Sporting and Athletic Goods.

*20 per cent but under 30 per cent.*

Artificial Teeth and Dental Work.      Oils and Illuminating Fluids.

*30 per cent but under 40 per cent.*

Brick, Tiles, and Sewer Pipe.	Electrical Apparatus and Appliances.
Building (including Concrete Walks, Paving, etc.).	Liquors and Beverages (Not Spirituous).
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Shipbuilding (including Awnings, Tents, and Decorations).

*40 per cent but under 50 per cent.*

Clothing.	Print Works, Dye Works, and Bleacheries.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Railroad Construction and Equipment.
Lumber.	Trunks and Valises.

*50 per cent but under 60 per cent.*

Cooking, Lighting, and Heating Apparatus.	Photographs and Photographic Materials.
Cotton Goods.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Fancy Articles (including Fine Arts and Taxidermy).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Flax, Hemp, and Jute Goods (including Linen).	Straw and Palm Leaf Goods.
Food Preparations (including Salt).	Tobacco, Snuff, and Cigars.
Glass.	Whips, Lashes, and Stocks.
Glue, Isinglass, and Starch.	

*60 per cent but under 70 per cent.*

Arms and Ammunition.	Models and Patterns.
Boxes (Paper and Wooden).	Musical Instruments and Materials.
Burial Cases, Caskets, Coffins, etc.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Printing, Publishing, and Bookbind- ing.
Carriages and Wagons.	Rubber and Elastic Goods (includ- ing Hose: Rubber, Linen, etc.).
Charcoal and Kindlers (including Fireworks and Matches).	Scientific Instruments and Appli- ances.
Furniture.	Stone.
Gas and Residual Products.	Tallow, Candles, Soap, and Grease.
Leather.	Wooden Goods (including Corks, Bungs, and Taps).
Liquors: Malt, Distilled, and Fer- mented.	Worsted Goods.
Machines and Machinery.	
Metals and Metallic Goods (includ- ing Clocks and Watches).	

*70 per cent but under 80 per cent.*

Agricultural Implements.	Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).
Artisans' Tools.	Hair Work (Animal and Human).
Boots and Shoes.	Paper and Paper Goods.
Brooms, Brushes, and Mops.	Woollen Goods.

*80 per cent but under 90 per cent.*

Chemical Preparations, Compounded (including Fertilizers).	Ivory, Bone, Shell, and Horn Goods, etc.
Cordage and Twine.	Toys and Games (Children's).
Electroplating (including Jewelry Burnishing and Lapidary Work).	

*90 per cent but under 100 per cent.*

Hosiery and Knit Goods.

A consideration of the percentages of selling price making a profit discloses quite a wide range, running from 15.80 per cent to 88.46 per cent, the extremes being separated by a variation of 72.66 per cent.

The industries showing the greatest proportion of selling price on which a profit was made are: Chemical Preparations, Compounded (including Fertilizers), 87.12 per cent; Toys and Games (Children's), 87.22 per cent; Cordage and Twine, 88.46 per cent. The industries having the smallest proportion

of selling price on which a profit was made are: Artificial Teeth and Dental Work, 24.66 per cent; Oils and Illuminating Fluids, 24.57 per cent; Sporting and Athletic Goods, 15.80 per cent.

### SELLING PRICE NOT MAKING A PROFIT.

The composition and manner of reading the subjoined table may be learned from a perusal of the introductory text to the table preceding given under the heading "Selling Price Making a Profit." Of course, in the table following, it is evident that the percentages indicate the proportions of selling price not making a profit.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	49
10 but under 20 per cent, . . . . .	8
20 but under 30 per cent, . . . . .	2
30 but under 40 per cent, . . . . .	2
No percentage not making a profit, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

An arrangement of industries by name under percentage classification heads is appended.

#### *Under 10 per cent.*

Arms and Ammunition.	Cooking, Lighting, and Heating Apparatus.
Artificial Teeth and Dental Work.	Cordage and Twine.
Artisans' Tools.	Drugs and Medicines (including Perfumes, Toilet Articles, etc.).
Boots and Shoes.	Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).
Boxes (Paper and Wooden).	Electrical Apparatus and Appliances.
Brick, Tiles, and Sewer Pipe.	Electroplating (including Jewelry Burnishing and Lapidary Work).
Brooms, Brushes, and Mops.	Fancy Articles (including Fine Arts and Taxidermy).
Building (including Concrete Walks, Paving, etc.).	Food Preparations (including Salt).
Burial Cases, Caskets, Coffins, etc.	Gas and Residual Products.
Carpeterings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Hair Work (Animal and Human).
Carriages and Wagons.	
Chemical Preparations, Compounded (including Fertilizers).	
Clothing.	

*Under 10 per cent — Concluded.*

Hosiery and Knit Goods.	Printing, Publishing, and Bookbinding.
Ivory, Bone, Shell, and Horn Goods, etc.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Liquors and Beverages (Not Spirituous).	Scientific Instruments and Appliances.
Liquors: Malt, Distilled, and Fermented.	Shipbuilding (including Awnings, Tents, and Decorations).
Lumber.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Machines and Machinery.	Sporting and Athletic Goods.
Metals and Metallic Goods (including Clocks and Watches).	Stone.
Models and Patterns.	Straw and Palm Leaf Goods.
Musical Instruments and Materials.	Tallow, Candles, Soap, and Grease.
Paints, Colors, and Crude Chemicals (including Dyestuffs).	Tobacco, Snuff, and Cigars.
Photographs and Photographic Materials.	Trunks and Valises.
Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).	Whips, Lashes, and Stocks.
	Wooden Goods (including Corks, Bungs, and Taps).
	Woollen Goods.

*10 per cent but under 20 per cent.*

Agricultural Implements.	Railroad Construction and Equipment.
Furniture.	Toys and Games (Children's).
Glue, Isinglass, and Starch.	Worsted Goods.
Leather.	
Paper and Paper Goods.	

*20 per cent but under 30 per cent.*

Cotton Goods.	Flax, Hemp, and Jute Goods (including Linen).
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*30 per cent but under 40 per cent.*

Oils and Illuminating Fluids.	Print Works, Dye Works, and Bleacheries.
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*No percentage not making a profit.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

The industries in which the greatest proportion of selling price did not pay a profit are: Flax, Hemp, and Jute Goods (including Linen), 28.53 per cent; Oils and Illuminating Fluids, 35.32 per cent; Print Works, Dye Works, and Bleacheries, 39.56 per cent. There are three industries in which no

percentage of selling price failed to pay a profit, viz., Charcoal and Kindlers (including Fireworks and Matches), Glass, and Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.). In each of these industries there was a certain percentage of selling price not reporting as regards profits. Next to these industries, the three having the smallest proportion of selling price not making a profit are: Scientific Instruments and Appliances, 0.22 per cent; Whips, Lashes, and Stocks, 0.01 per cent; and Hair Work (Animal and Human), less than one one-hundredth of one per cent.

#### SELLING PRICE NOT REPORTING AS REGARDS PROFITS.

By this heading is meant that for a certain proportion of selling price no report was made as to whether there was a profit made on the goods manufactured, the value of which was represented by this selling price, or whether the goods were sold at a loss. In the absence of definite information as to the profit or loss resulting from the sale of these goods, their value has been classed as "Selling Price Not Reporting as Regards Profits." The classification of percentages of such description of selling price, with the number of industries having the specified percentages of selling price for which no report was made as regards profits, is next given.

CLASSIFICATION OF PERCENTAGES.										Number of Industries
Under 10 per cent,	.	.	.	.	.	.	.	.	.	8
10 but under 20 per cent,	.	.	.	.	.	.	.	.	.	10
20 but under 30 per cent,	.	.	.	.	.	.	.	.	.	14
30 but under 40 per cent,	.	.	.	.	.	.	.	.	.	16
40 but under 50 per cent,	.	.	.	.	.	.	.	.	.	10
50 but under 60 per cent,	.	.	.	.	.	.	.	.	.	6
60 but under 70 per cent,	.	.	.	.	.	.	.	.	.	3
70 but under 80 per cent,	.	.	.	.	.	.	.	.	.	1
80 but under 90 per cent,	.	.	.	.	.	.	.	.	.	1
WHOLE NUMBER OF INDUSTRIES, . . . . .										64

We subjoin a classification of industries by name under the different percentage heads.

#### *Under 10 per cent.*

Chemical Preparations, Compounded (including Fertilizers).	Hosiery and Knit Goods. Toys and Games (Children's).
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*10 per cent but under 20 per cent.*

Agricultural Implements.

Artisans' Tools.

Cordage and Twine.

Cotton Goods.

Electroplating (including Jewelry  
Burnishing and Lapidary Work).

Flax, Hemp, and Jute Goods (including Linen).

Ivory, Bone, Shell, and Horn Goods,  
etc.

Paper and Paper Goods.

Print Works, Dye Works, and Bleach-  
eries.

Woollen Goods.

*20 per cent but under 30 per cent.*

Boots and Shoes.

Brooms, Brushes, and Mops.

Carpetings (including Cotton, Wool-  
len, and Other Textiles, and Mixed  
Textiles).Earthen, Plaster, and Stone Ware  
(including Cement, Kaolin, Lime,  
and Plaster).

Furniture.

Glue, Isinglass, and Starch.

Hair Work (Animal and Human).

Leather.

Machines and Machinery.

Musical Instruments and Materials.

Paints, Colors, and Crude Chemicals  
(including Dyestuffs).Rubber and Elastic Goods (including  
Hose: Rubber, Linen, etc.).

Stone.

Worsted Goods.

*30 per cent but under 40 per cent.*

Arms and Ammunition.

Boxes (Paper and Wooden).

Burial Cases, Caskets, Coffins, etc.

Carriages and Wagons.

Charcoal and Kindlers (including  
Fireworks and Matches).Cooking, Lighting, and Heating Ap-  
paratus.Fancy Articles (including Fine Arts  
and Taxidermy).

Gas and Residual Products.

Liquors: Malt, Distilled, and Fer-  
mented.Metals and Metallic Goods (including  
Clocks and Watches).

Models and Patterns.

Printing, Publishing, and Bookbind-  
ing.Scientific Instruments and Appli-  
ances.

Tallow, Candles, Soap, and Grease.

Tobacco, Snuff, and Cigars.

Wooden Goods (including Corks,  
Bungs, and Taps).*40 per cent but under 50 per cent.*Food Preparations (including Salt).  
Glass.

Lumber.

Oils and Illuminating Fluids.

Photographs and Photographic Ma-  
terials.Polishes and Dressing (including Em-  
ery and Sand Paper and Cloth, etc.).Railroad Construction and Equip-  
ment.Silk and Silk Goods (including But-  
tons and Dress Trimmings).

Straw and Palm Leaf Goods.

Whips, Lashes, and Stocks.

*50 per cent but under 60 per cent.*Building (including Concrete Walks,  
Paving, etc.).

Clothing.

Electrical Apparatus and Appli-  
ances.Ink, Mucilage, and Paste (including  
Crayons, Pencils, Crucibles, etc.).Shipbuilding (including Awnings,  
Tents, and Decorations).

Trunks and Valises.

*60 per cent but under 70 per cent.*

Brick, Tiles, and Sewer Pipe.

Liquors and Beverages (Not Spirit-  
uous).

Drugs and Medicines (including

Perfumes, Toilet Articles, etc.).

*70 per cent but under 80 per cent.*

Artificial Teeth and Dental Work.

*80 per cent but under 90 per cent.*

Sporting and Athletic Goods.

The industries having the largest proportion of selling price for which no report was made regarding profits are: Drugs and Medicines, 68.21 per cent; Artificial Teeth and Dental Work, 73.52 per cent; and Sporting and Athletic Goods, 83.64 per cent. The industries in which for the smallest proportion of selling price information concerning profits was not supplied are: Chemical Preparations, Compounded (including Fertilizers), 8.40 per cent; Hosiery and Knit Goods, 4.36 per cent; and Toys and Games (Children's), 1.73 per cent.

## ESTABLISHMENTS AND SELLING PRICE IN ALL INDUSTRIES.

As in the case of "Establishments and Capital Invested in All Industries," we reproduce from page 398, *ante*, the aggregates for All Industries, showing the respective numbers and percentages of establishments, and the respective values of goods made and work done (or selling price) and percentages, making a profit, not making a profit, or not answering, or reporting, as regards profits.

## SELLING PRICE. ALL INDUSTRIES.

CLASSIFICATION AS REGARDS PROFIT.	Number of Estab- lishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab- lishments	Selling Price
Making a profit, . . . . .	9,251	\$414,518,434	39.48	61.44
Not making a profit, . . . . .	762	52,416,619	3.25	7.77
Totals, . . . . .	10,013	\$466,935,053	42.73	69.21
Not answering, . . . . .	13,418	207,701,216	57.27	30.79
AGGREGATES, . . . . .	23,431	\$674,636,269	100.00	100.00

Although the numbers and percentages of establishments coming under the three forms of the profit classification are the same as in the table "Capital Invested, All Industries," on page 416, *ante*, yet a brief consideration of them becomes necessary as they are brought into juxtaposition with the amounts and percentages for selling price, and from their relations valuable statistical results are secured bearing upon the question of profits.

In 9,251 establishments, or 39.48 per cent of all establishments in all industries, goods to the value of \$414,516,434, or 61.44 per cent of the total value of all goods made in all establishments, brought such a price that they afforded a profit to the proprietors of the 9,251 establishments considered. In 762 establishments, or 3.25 per cent of all establishments in all industries, goods sold for \$52,416,619, or 7.77 per cent of the total value of all goods made in all establishments, did not allow a profit to the proprietors of the 762 establishments under consideration. There were 13,418 establishments, or 57.27 per cent of all establishments in all industries, that did not report as regards profit made on goods sold. The value of these goods was \$207,701,216, or 30.79 per cent of the total value of goods made in all establishments.

It will be noticed that although 57.27 per cent of the whole number of establishments in all industries is not represented in the returns as to profits, nevertheless the selling price of the goods made and work done in those establishments was but 30.79 per cent of the total value of goods made and work done in all establishments. The establishments reporting as to profits, that is, either making a profit or not making a profit, formed but 42.73 per cent, or less than one-half, of the whole number of establishments in all industries, but the value of the goods made and work done in them formed 69.21 per cent of the total value of product in all establishments. For the reason, therefore, that nearly 70 per cent of the selling price of all the goods made and work done in the manufacturing and mechanical establishments of the Commonwealth is represented as regards profits, we believe the results hereinafter given may be accepted as fully representative of the net profits made in manufacturing industries in this State.\*

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\* See also remarks on page 417, *ante*.



## SELLING PRICE REPRESENTED IN THIS INVESTIGATION.

In the presentation and consideration of "Establishments and Selling Price" the whole number of establishments and the aggregate value of goods made and work done as presented in the Decennial Industrial Statistics of 1885 have each been reckoned as forming 100 per cent. That is, the respective percentages of establishments in which a profit was made, in which a profit was not made, and for which no report was made, when added made 100 per cent, representing 23,431 establishments. The respective percentages of selling price making a profit, not making a profit, and not represented as regards profits, when aggregated formed 100 per cent, being the equivalent of goods made and work done valued at \$674,634,269.

In discussing "Selling Price Represented in this Investigation" we drop from consideration, first, the establishments, for their numbers and percentages as regards those making or not making a profit are identical with the presentations under "Establishments Reporting and Capital Represented in this Investigation" on pages 417-431, *ante*; second, we eliminate that portion of selling price on which we do not know whether there was a profit made or not. We thus have to deal only with selling price represented as regards profits, that is, making a profit or not making a profit, and the sum of these two statistical elements is considered as forming 100 per cent.

The table which follows is so simple in construction and graphic in delineation that no further introduction in the way of explanation is deemed necessary.

INDUSTRIES.	SELLING PRICE REPRESENTED —			PERCENTAGES OF SELLING PRICE —	
	as regards profits	making a profit	not making a profit	making a profit	not making a profit
Agricultural implements, . . . .	\$1,174,738	\$1,039,212	\$135,526	88.46	11.54
Arms and ammunition, . . . .	1,408,859	1,295,590	113,269	91.96	8.04
Artificial teeth and dental work, . . . .	172,587	160,703	11,884	93.11	6.89
Artisans' tools, . . . .	2,027,087	1,919,593	107,494	94.70	5.30
Boots and shoes, . . . .	85,899,333	81,509,537	4,389,796	94.89	5.11
Boxes (paper and wooden), . . . .	2,879,347	2,771,534	107,813	96.26	3.74
Brick, tiles, and sewer pipe, . . . .	533,894	496,544	37,350	93.00	7.00
Brooms, brushes, and mops, . . . .	1,054,011	1,019,343	34,668	96.71	3.29

INDUSTRIES.	SELLING PRICE REPRESENTED—			PERCENTAGES OF SELLING PRICE—	
	as regards profits	making a profit	not making a profit	making a profit	not making a profit
Building (including concrete walks, paving, etc.). . . . .	\$16,303,245	\$15,759,557	\$543,688	96.67	3.33
Burial cases, caskets, coffins, etc., . . .	472,086	465,536	6,500	98.62	1.38
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	7,526,432	7,076,032	450,400	94.02	5.98
Carriages and wagons, . . . . .	5,027,457	4,907,799	119,658	97.62	2.38
Charcoal and kindlers (including fire-works and matches), . . . . .	68,912	68,912	-	100.00	-
Chemical preparations, compounded (including fertilizers), . . . . .	3,612,639	3,435,880	176,759	95.11	4.89
Clothing, . . . . .	15,407,247	14,536,743	860,504	93.80	6.20
Cooking, lighting, and heating apparatus, . . .	1,913,119	1,857,769	55,350	97.11	2.89
Cordage and twine, . . . . .	4,505,177	4,491,444	13,733	99.70	0.30
Cotton goods, . . . . .	53,913,920	36,458,316	17,455,604	67.62	32.38
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	1,631,564	1,602,303	29,171	98.21	1.79
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . .	493,258	487,884	5,374	98.91	1.09
Electrical apparatus and appliances, . . .	624,819	558,037	66,782	89.31	10.69
Electroplating (including jewelry burnishing and lapidary work), . . . . .	224,457	211,857	12,600	94.39	5.61
Fancy articles (including fine arts and taxidermy), . . . . .	77,263	73,263	4,000	94.82	5.18
Flax, hemp, and jute goods (including linen), . . . . .	2,191,612	1,460,623	730,989	66.65	33.35
Food preparations (including salt), . . . . .	47,504,946	45,703,330	1,801,616	96.21	3.79
Furniture, . . . . .	8,992,466	7,687,715	1,304,751	85.49	14.51
Gas and residual products, . . . . .	3,014,136	2,991,245	22,891	99.24	0.76
Glass, . . . . .	565,584	565,584	-	100.00	-
Glue, isinglass, and starch, . . . . .	938,231	760,291	177,940	81.03	18.97
Hair work (animal and human), . . . . .	352,554	352,530	24	99.99	0.01
Hosiery and knit goods, . . . . .	4,013,464	3,880,892	132,572	96.70	3.30
Ink, muclago, and paste (including crayons, pencils, crucibles, etc.), . . . . .	109,798	109,798	-	100.00	-
Ivory, bone, shell, and horn goods, etc., . . .	1,408,143	1,353,243	54,900	96.10	3.90
Leather, . . . . .	21,288,324	18,404,460	2,883,864	86.45	13.55
Liquors and beverages (not spirituous), . . .	245,846	240,846	5,000	97.97	2.03
Liquors: malt, distilled, and fermented, . . .	5,248,579	5,215,585	32,994	99.37	0.63
Lumber, . . . . .	1,911,869	1,759,903	151,956	92.05	7.95
Machines and machinery, . . . . .	14,749,668	13,373,483	1,376,185	90.67	9.33
Metals and metallic goods (including clocks and watches), . . . . .	30,836,513	28,942,954	1,893,559	93.86	6.14
Models and patterns, . . . . .	175,891	171,891	4,000	97.73	2.27
Musical instruments and materials, . . . . .	4,451,212	4,212,212	239,000	94.63	5.37
Oils and illuminating fluids, . . . . .	1,374,543	564,001	810,542	41.03	58.97
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	1,149,571	1,016,415	133,156	88.42	11.58
Paper and paper goods, . . . . .	17,253,026	14,916,164	2,336,862	86.46	13.54
Photographs and photographic materials, . . .	560,894	546,096	14,198	97.47	2.53
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	1,396,532	1,326,930	69,602	95.02	4.98

INDUSTRIES.	SELLING PRICE REPRESENTED—			PERCENTAGES OF SELLING PRICE—	
	as regards profits	making a profit	not making a profit	making a profit	not making a profit
Printing, publishing, and bookbinding, .	\$10,504,447	\$9,930,865	\$573,582	94.54	5.46
Print works, dye works, and bleacheries, .	12,951,763	6,669,898	6,281,860	51.50	48.50
Railroad construction and equipment, .	1,191,899	930,668	261,231	78.08	21.92
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	9,563,145	9,010,817	552,328	94.22	5.78
Scientific instruments and appliances, .	827,808	824,858	2,750	99.67	0.33
Shipbuilding (including awnings, tents, and decorations), . . . . .	897,931	863,990	33,941	96.22	3.78
Silk and silk goods (including buttons and dress trimmings), . . . . .	2,693,700	2,350,269	343,431	87.25	12.75
Sporting and athletic goods, . . . . .	176,680	170,680	6,000	96.60	3.40
Stone, . . . . .	4,076,233	3,831,510	244,723	94.00	6.00
Straw and palm leaf goods, . . . . .	3,751,953	3,301,775	450,178	88.00	12.00
Tallow, candles, soap, and grease, . .	2,273,505	2,250,961	22,544	99.01	0.99
Tobacco, snuff, and cigars, . . . . .	1,901,379	1,670,173	231,206	87.64	12.36
Toys and games (children's), . . . . .	311,407	276,407	35,000	88.76	11.24
Trunks and valises, . . . . .	161,065	152,525	8,530	94.70	5.30
Whips, lashes, and stocks, . . . . .	591,822	591,822	100	99.98	0.02
Wooden goods (including corks, bungs, and taps), . . . . .	3,160,771	2,992,698	168,073	94.68	5.32
Woollen goods, . . . . .	26,834,555	24,169,607	2,664,948	90.07	9.93
Worsted goods, . . . . .	8,288,552	6,766,982	1,521,570	81.64	18.36

The plan of analysis is the same as for the other presentation of selling price. See consideration on pages 456-467, *ante*.

#### SELLING PRICE REPRESENTED MAKING A PROFIT.

No more expressive arrangement can be made than to bring the industries under the usual percentage classification, the basis of which classification, being the same in all cases, allows of direct comparisons being made between the different sections of the analysis.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
40 but under 50 per cent, . . . . .	1
50 but under 60 per cent, . . . . .	1
60 but under 70 per cent, . . . . .	2
70 but under 80 per cent, . . . . .	1
80 but under 90 per cent, . . . . .	12
90 but under 100 per cent, . . . . .	44
100 per cent, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

We append a classification of industries by name under their appropriate percentage heads.

*40 per cent but under 50 per cent.*

Oils and Illuminating Fluids.

*50 per cent but under 60 per cent.*

Print Works, Dye Works, and Bleacheries.

*60 per cent but under 70 per cent.*

Cotton Goods.

Flax, Hemp, and Jute Goods (including Linen).

*70 per cent but under 80 per cent.*

Railroad Construction and Equipment.

*80 per cent but under 90 per cent.*

Agricultural Implements.

Electrical Apparatus and Appliances.

Furniture.

Glue, Isinglass, and Starch.

Leather.

Paints, Colors, and Crude Chemicals (including Dyestuffs).

Paper and Paper Goods.

Silk and Silk Goods (including Buttons and Dress Trimmings).

Straw and Palm Leaf Goods.

Tobacco, Snuff, and Cigars.

Toys and Games (Children's).

Worsted Goods.

*90 per cent but under 100 per cent.*

Arms and Ammunition.

Artificial Teeth and Dental Work.

Artisans' Tools.

Boots and Shoes.

Boxes (Paper and Wooden).

Brick, Tiles, and Sewer Pipe.

Brooms, Brushes, and Mops.

Building (including Concrete Walks, Paving, etc.).

Burial Cases, Caskets, Coffins, etc.

Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).

Carriages and Wagons.

Chemical Preparations, Compounded (including Fertilizers).

Clothing.

Cooking, Lighting, and Heating Apparatus.

Cordage and Twine.

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).

Electroplating (including Jewelry Burnishing and Lapidary Work).

Fancy Articles (including Fine Arts and Taxidermy).

Food Preparations (including Salt). Gas and Residual Products.

Hair Work (Animal and Human).

Hosiery and Knit Goods.

Ivory, Bone, Shell, and Horn Goods, etc.

Liquors and Beverages (Not Spirituous).

Liquors: Malt, Distilled, and Fermented.

Lumber.

Machines and Machinery.

Metals and Metallic Goods (including Clocks and Watches).

Models and Patterns.

*90 per cent but under 100 per cent — Concluded.*

Musical Instruments and Materials.	Shipbuilding (including Awnings, Tents, and Decorations).
Photographs and Photographic Materials.	Sporting and Athletic Goods.
Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).	Stone.
Printing, Publishing, and Bookbinding.	Tallow, Candles, Soap, and Grease.
Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).	Trunks and Valises.
Scientific Instruments and Appliances.	Whips, Lashes, and Stocks.
	Wooden Goods (including Corks, Bungs, and Taps).
	Woollen Goods.

*100 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).	Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).
Glass.	

The industries in which all the selling price represented as regards profits (or 100 per cent) afforded a profit are: Charcoal and Kindlers (including Fireworks and Matches), Glass, and Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.). The industries closely approximating to 100 per cent are Hair Work (Animal and Human) with 99.99, Whips, Lashes, and Stocks with 99.98, and Cordage and Twine with 99.70 per cent. The industries having the smallest proportion of selling price represented as regards profits affording a profit are: Flax, Hemp, and Jute Goods (including Linen), 66.65 per cent; Print Works, Dye Works, and Bleacheries, 51.50 per cent; and Oils and Illuminating Fluids, 41.03 per cent.

**SELLING PRICE REPRESENTED NOT MAKING A PROFIT.**

We present, first, the usual classification of percentages, with the number of industries belonging in each division of the classification.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	44
10 but under 20 per cent, . . . . .	12
20 but under 30 per cent, . . . . .	1
30 but under 40 per cent, . . . . .	2
40 but under 50 per cent, . . . . .	1
50 but under 60 per cent, . . . . .	1
No percentage not making a profit, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A text-tabular arrangement of industries by name under the various percentage classification heads follows :

*Under 10 per cent.*

Arms and Ammunition.	Ivory, Bone, Shell, and Horn Goods, etc.
Artificial Teeth and Dental Work.	Liquors and Beverages (Not Spirituous).
Artisans' Tools.	Liquors: Malt, Distilled, and Fermented.
Boots and Shoes.	Lumber.
Boxes (Paper and Wooden).	Machines and Machinery.
Brick, Tiles, and Sewer Pipe.	Metals and Metallic Goods (including Clocks and Watches).
Brooms, Brushes, and Mops.	Models and Patterns.
Building (including Concrete Walks, Paving, etc.).	Musical Instruments and Materials.
Burial Cases, Caskets, Coffins, etc.	Photographs and Photographic Materials.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Carriages and Wagons.	Printing, Publishing, and Bookbinding.
Chemical Preparations, Compounded (including Fertilizers).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Clothing.	Scientific Instruments and Appliances.
Cooking, Lighting, and Heating Apparatus.	Shipbuilding (including Awnings, Tents, and Decorations).
Cordage and Twine.	Sporting and Athletic Goods.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Stone.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Tallow, Candles, Soap, and Grease.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Trunks and Valises.
Fancy Articles (including Fine Arts and Taxidermy).	Whips, Lashes, and Stocks.
Food Preparations (including Salt).	Wooden Goods (including Corks, Bungs, and Taps).
Gas and Residual Products.	Woollen Goods.
Hair Work (Animal and Human).	
Hosiery and Knit Goods.	

*10 per cent but under 20 per cent.*

Agricultural Implements.	Paper and Paper Goods.
Electrical Apparatus and Appliances.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Furniture.	Straw and Palm Leaf Goods.
Glue, Isinglass, and Starch.	Tobacco, Snuff, and Cigars.
Leather.	Toys and Games (Children's).
Paints, Colors, and Crude Chemicals (including Dyestuffs).	Worsted Goods.

*20 per cent but under 30 per cent.*

Railroad Construction and Equipment.

*30 per cent but under 40 per cent.*

Cotton Goods.

Flax, Hemp, and Jute Goods (including Linen).

*40 per cent but under 50 per cent.*

Print Works, Dye Works, and Bleacheries.

*50 per cent but under 60 per cent.*

Oils and Illuminating Fluids.

*No percentage not making a profit.*

Charcoal and Kindlers (including  
Fireworks and Matches).  
Glass.

Ink, Mucilage, and Paste (including  
Crayons, Pencils, Crucibles  
etc.).

Three industries, enumerated above under the heading "No percentage not making a profit" have been previously enumerated as having 100 per cent of their establishments paying a profit, on the basis of selling price represented. The three industries in which the greatest proportion of selling price represented as regards profits did not afford a profit are: Flax, Hemp, and Jute Goods (including Linen), 33.35 per cent; Print Works, Dye Works, and Bleacheries, 48.50 per cent; and Oils and Illuminating Fluids, 58.97 per cent. On the other hand, the three industries having the smallest proportion of selling price represented as regards profits that did not afford a profit are: Cordage and Twine, 0.30 per cent; Whips, Lashes, and Stocks, 0.02 per cent; and Hair Work (Animal and Human), 0.01 per cent.

We close our discussion of this portion of the subject under consideration with the presentation and analysis of the following table:

SELLING PRICE REPRESENTED. ALL INDUSTRIES.

CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments	Value of Goods Made and Work Done	PERCENTAGES	
			Estab-lishments	Selling Price
Making a profit, . . . . .	9,251	\$414,516,434	92.39	58.77
Not making a profit, . . . . .	762	52,416,619	7.61	11.23
TOTALS, . . . . .	10,013	\$466,933,053	100.00	100.00

As has been previously stated, of 10,013 establishments reporting as regards profits, there were 9,251, or 92.39 per cent, that returned a profit, while 762, or 7.61 per cent, did not return a profit. See page 430, *ante*. Of \$466,933,053 worth of goods made and work done, \$414,516,434 worth, or 88.77 per cent, returned a profit, while \$52,416,619 worth, or 11.23 per cent, did not return a profit. The value of the average annual product of the establishments making a profit was \$44,808; of establishments not making a profit, \$68,788; and of all establishments reporting as to profits, \$46,633. It is thus seen that the establishments not making a profit are, as a rule, the larger ones.

We next bring into the same table the percentages of capital represented and selling price represented making a profit and not making a profit.

CLASSIFICATION AS REGARDS PROFIT.	PERCENTAGES	
	Capital Represented	Selling Price Represented
Making a profit, . . . . .	81.22	88.77
Not making a profit, . . . . .	18.78	11.23
TOTALS, . . . . .	100.00	100.00

We see from this presentation that 81.22 per cent of capital represented turned out 88.77 per cent of the total selling price represented, and made a profit thereon, while 18.78 per cent of the capital represented as regards profits made goods valued at but 11.23 per cent of the selling price represented, and failed to make a profit on the same. It is obvious that the 81.22 per cent of capital represented that made a profit turned out goods that represented 7.55 per cent more than its average proportion, while the 18.78 per cent of capital represented that did not make a profit ran 7.55 per cent below its average proportion of selling price represented.

As contributing to an explanation of the relations between capital and selling price, both represented as regards profits, the following table is submitted:



CLASSIFICATION AS REGARDS PROFIT.	Number of Establishments Reporting	Average Capital Invest- ed per Establishment	Value of Aver- age An- nual Product per Establish- ment	Proportional Product to One Dollar of Capital Invested
Making a profit, . . . . .	9,251	\$33,163	\$44,808	\$1.35
Not making a profit, . . . . .	762	93,071	68,788	0.74
TOTALS, . . . . .	10,013	\$37,722	\$46,633	\$1.24

The inference to be drawn from these figures would seem to be, that for each dollar of capital there must be more than a dollar's worth of product in order that a profit may be made, for those establishments making a profit turn out goods valued at \$1.35 for each dollar of capital invested, while those establishments that failed to secure a profit show a product value of but 74 cents for each dollar of invested capital. The grand result for all establishments reporting as to profits is a product value of \$1.24 for each dollar of capital invested.

### COST OF PRODUCTION.

By "Cost of Production" is meant the combined sum of the values of materials, services, and expenses which form the cost of articles manufactured up to the point where the manufacturer is ready to sell them. For obvious reasons our consideration of this question is based upon percentages, but behind these percentages, and forming the groundwork upon which these percentages were figured, are the actual values, or "costs," as returned by the manufacturers. The cost of production, for each industry, is represented by 100 per cent, and the respective percentages for stock used, salaries, wages, rent, taxes, insurance, freight, new equipment, repairs, and other expenses, in the case of each industry, aggregate 100 per cent.

The following recapitulation brings forward the specified percentages for each industry, each horizontal line aggregating 100 per cent :

## RECAPITULATION. COST OF PRODUCTION. PERCENTAGES.

INDUSTRIES.	Stock Used	Sal- aries	Wages	Rent	Taxes	Insur- ance	Freight	New Equip- ment	Re- pairs	Other Ex- penses
Agricultural implements, .	52.11	5.05	34.88	1.05	1.12	0.30	5.18	-	0.31	-
Arms and ammunition, .	37.81	3.94	53.34	0.73	1.35	0.63	0.92	0.14	1.14	-
Artificial teeth and dental work, . . . . .	51.14	-	10.86	34.49	1.91	0.42	0.26	-	0.92	-
Artisans' tools, . . . .	38.18	6.98	47.60	0.83	1.15	0.25	2.68	0.35	1.93	-
Boots and shoes, . . . .	69.29	1.23	27.65	0.56	0.16	0.22	0.58	0.08	0.15	0.06
Boxes (paper and wooden), .	60.50	1.48	30.96	1.64	0.51	0.44	3.56	0.03	0.85	0.03
Brick, tiles, and sewer pipe, .	35.56	3.16	49.83	0.72	1.80	0.70	5.44	0.87	1.73	0.19
Brooms, brushes, and mops, .	66.05	3.17	28.03	1.05	0.49	0.48	0.70	-	0.03	-
Building (including concrete walks, paving, etc.), . . .	56.22	0.42	40.32	1.48	0.23	0.18	0.84	0.01	0.16	0.14
Burial cases, caskets, coffins, etc., . . . . .	61.45	5.04	28.20	1.35	0.64	1.42	0.72	-	0.69	0.49
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	70.75	1.62	23.39	0.29	0.80	0.14	0.55	1.64	0.82	-
Carriages and wagons, . . .	52.69	0.90	41.23	2.09	0.53	0.59	1.49	0.02	0.46	*
Charcoal and kindlers (includ- ing fireworks and matches), .	47.68	-	49.20	-	0.27	-	1.94	-	0.91	-
Chemical preparations, com- pounded (including fertil- izers), . . . . .	73.18	1.54	10.81	0.14	0.24	0.33	10.93	-	2.80	0.03
Clothing, . . . . .	69.52	2.05	24.21	3.35	0.20	0.20	0.32	0.01	0.14	-
Cooking, lighting, and heat- ing apparatus, . . . . .	41.03	3.85	48.94	1.92	0.56	0.45	2.72	0.02	0.51	-
Cordage and twine, . . . .	77.34	2.54	14.63	0.38	0.77	1.05	1.28	0.24	1.77	-
Cotton goods, . . . . .	62.03	1.53	28.84	0.07	1.78	0.35	2.44	0.90	1.92	0.14
Drugs and medicines (includ- ing perfumes, toilet ar- ticles, etc.), . . . . .	80.80	4.20	6.33	5.23	0.71	0.38	2.04	-	0.31	-
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), .	32.75	4.53	50.80	1.35	0.75	0.84	6.47	-	2.71	-
Electrical apparatus and ap- pliances, . . . . .	41.42	9.34	42.39	3.50	2.34	0.49	0.28	-	0.24	-
Electroplating (including jew- elry burnishing and lapi- dary work), . . . . .	41.58	6.26	43.62	7.17	0.44	0.19	0.32	-	0.42	-
Fancy articles (including fine arts and taxidermy), . . .	34.20	3.16	48.97	11.62	0.37	0.57	1.11	-	-	-
Flax, hemp, and jute goods (including linen), . . . .	71.89	1.68	21.91	0.10	0.52	0.22	2.26	0.30	0.65	0.47
Food preparations (including salt), . . . . .	90.81	0.44	6.64	0.52	0.23	0.30	0.59	*	0.29	0.18
Furniture, . . . . .	55.01	1.98	35.30	2.34	0.57	8.10	1.49	*	0.21	-
Gas and residual products, .	50.06	7.42	24.38	0.09	4.56	0.01	3.27	8.62	1.59	-
Glass, . . . . .	38.37	7.08	48.75	3.74	1.06	0.22	0.56	-	0.22	-
Glue, isinglass, and starch, .	71.25	0.89	16.82	0.09	0.72	0.38	1.33	-	8.47	0.05
Hair work (animal and hu- man), . . . . .	80.73	1.58	13.81	2.12	0.14	0.05	1.10	-	0.47	-

\* Less than one one-hundredth of one per cent.

*Recapitulation. Cost of Production. Percentages—Continued.*

INDUSTRIES.	Stock Used	Sal- aries	Wages	Rent	Taxes	Insur- ance	Freight	New Equip- ment	Re- pairs	Other Ex- penses
Hosiery and knit goods, .	64.20	2.46	28.77	0.15	0.69	0.88	0.76	1.10	0.99	-
Ink, mucilage, and paste (in- cluding crayons, pencils, crucibles, etc.), . . .	58.75	-	31.95	3.06	0.44	0.21	3.07	1.98	0.54	-
Ivory, bone, shell, and horn goods, etc. . . . .	67.52	3.40	25.04	0.70	0.36	0.35	1.52	-	1.11	-
Leather, . . . . .	78.95	0.73	17.07	0.59	0.25	0.81	1.71	*	0.39	*
Liquors and beverages (not spirituous), . . . .	55.98	5.77	28.96	4.92	0.83	0.41	2.22	-	0.83	0.58
Liquors: malt, distilled, and fermented, . . . . .	74.53	3.26	13.33	1.05	0.81	0.33	1.01	-	5.61	0.07
Lumber, . . . . .	71.04	0.71	21.15	0.47	0.72	0.70	3.47	0.08	1.62	0.04
Machines and machinery, .	45.92	5.97	43.36	1.34	1.10	0.53	1.00	0.06	0.64	0.08
Metals and metallic goods (in- cluding clocks and watches),	55.74	3.10	36.47	1.19	0.68	0.36	1.73	0.05	0.63	0.05
Models and patterns, . .	24.30	0.92	64.96	8.66	0.52	0.40	0.24	-	-	-
Musical instruments and ma- terials, . . . . .	51.41	4.24	39.89	2.19	0.47	0.41	0.79	*	0.50	0.10
Oils and illuminating fluids, .	84.81	1.49	8.19	0.38	0.34	0.05	3.88	0.09	0.77	-
Paints, colors, and crude chemicals (including dye- stuffs), . . . . .	75.33	5.16	11.92	0.48	0.35	0.50	4.92	-	1.23	0.11
Paper and paper goods, . .	68.92	2.85	17.69	0.50	0.99	0.58	5.13	0.60	2.73	0.01
Photographs and photo- graphic materials, . . .	39.69	2.40	39.61	14.51	1.37	0.86	0.16	-	1.38	0.02
Polishes and dressing (includ- ing emery and sand paper and cloth, etc.), . . .	72.44	7.20	14.80	1.39	0.50	0.26	2.85	0.22	0.34	-
Printing, publishing, and bookbinding, . . . . .	38.90	10.06	44.23	3.82	0.67	0.51	0.02	0.10	0.39	1.30
Print works, dye works, and bleacheries, . . . . .	81.19	1.37	14.84	0.18	0.58	0.13	0.20	0.09	1.23	0.19
Railroad construction and equipment, . . . . .	55.32	2.51	38.40	0.03	0.75	0.40	0.47	-	2.12	-
Rubber and elastic goods (in- cluding hose: rubber, linen, etc.), . . . . .	76.03	1.75	20.55	0.38	0.41	0.36	0.13	-	0.39	-
Scientific instruments and ap- pliances, . . . . .	53.92	5.87	34.81	1.63	0.59	0.22	0.11	2.47	0.38	-
Shipbuilding (including awn- ings, tents, and decora- tions), . . . . .	57.06	0.14	38.55	3.10	0.38	0.44	0.01	-	0.32	-
Silk and silk goods (including buttons and dress trim- mings), . . . . .	67.59	2.78	27.18	0.27	0.23	0.13	1.02	-	0.80	-
Sporting and athletic goods, .	58.97	2.09	31.55	3.07	0.32	2.79	0.95	-	0.26	-
Stone, . . . . .	32.44	2.36	58.54	0.79	0.64	0.32	4.27	0.06	0.25	0.33
Straw and palm leaf goods, .	65.37	3.68	27.21	0.45	0.26	0.44	1.53	0.04	0.56	0.46
Tallow, candles, soap, and grease, . . . . .	85.40	1.25	10.59	0.48	0.37	0.34	1.11	-	0.46	-

\* Less than one one-hundredth of one per cent.

*Recapitulation. Cost of Production. Percentages — Concluded.*

INDUSTRIES.	Stock Used	Sal- aries	Wages	Rent	Taxes	Insur- ance	Freight	New Equip- ment	Re- pairs	Other Ex- penses
Tobacco, snuff, and cigars, .	56.77	4.61	35.57	1.97	0.26	0.28	0.34	-	0.20	-
Toys and games (children's),	43.48	4.83	45.07	1.63	0.64	0.30	2.95	-	1.10	-
Trunks and valises, .	66.37	0.33	27.55	4.45	0.17	0.75	0.87	-	0.51	-
Whips, lashes, and stocks, .	54.49	9.21	31.14	2.11	1.41	0.76	0.54	-	0.34	-
Wooden goods (including corks, bungs, and taps), .	51.95	2.17	37.80	2.94	0.63	0.70	3.26	0.01	0.54	-
Woollen goods, . . .	71.58	1.77	20.72	0.53	0.56	0.39	1.67	0.46	1.61	0.71
Worsted goods, . . .	65.30	0.87	27.95	0.40	0.88	0.14	0.98	+	3.48	-

\* Less than one one-hundredth of one per cent.

The method of analysis will be to consider each item entering into the cost of production in detail.

## STOCK USED.

We first arrange the 64 industries in accordance with a classification of percentages.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
20 but under 30 per cent, . . . . .	1
30 but under 40 per cent, . . . . .	9
40 but under 50 per cent, . . . . .	6
50 but under 60 per cent, . . . . .	17
60 but under 70 per cent, . . . . .	13
70 but under 80 per cent, . . . . .	12
80 but under 90 per cent, . . . . .	5
90 but under 100 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

In Food Preparations (including Salt), 90.81 per cent of the cost of production is represented by stock used; in Tallow, Candles, Soap, and Grease, 85.40 per cent; and in Oils and Illuminating Fluids, 84.81 per cent. These are the highest percentages; the lowest are: Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster), 32.75 per cent; Stone, 32.44 per cent; and Models and Patterns, 24.30 per cent.

Although the percentage of stock used in Print Works, Dye Works, and Bleacheries, 81.19, is not as large as in some other industries, as just shown, yet this percentage is abnormal, and

is based upon amounts that are too large when considered in relation with the other figures supplied. The situation, which on page 365, *ante*, is called "a peculiar condition," is this: in Censuses prior to 1885 a duplication of the cotton goods product always occurred in the returns from the print works, dye works, and bleacheries. The reason for this is easily seen. Completed cotton cloth, which had been considered as forming the product of the cotton mill where it was made, was sent to the print works to be converted, we will suppose, into prints (or calico), to the dye works to be colored and finished as cambric, or it may be to the bleachery to be whitened and perhaps calendered. These processes *added* a comparatively small amount to the original value, but if the value of the goods, before being subjected to the various processes, was taken in making up stock used, then it was but natural to consider the completed article at its full value, and thus at once to duplicate, and in some cases enhance twice or to triplicate, the original value of the goods subjected to the processes. In the Industrial Statistics of 1885 an attempt was made to arrive at the enhanced value, or the value *added* to the original value by the various processes. This was done, and in arriving at the value of work done the original value of the goods, before the processes, was omitted. But, in order to secure the enhanced value, it was necessary to know the original value before being subjected to the processes, and thus the original value was included in the "stock used" but was omitted from the "value of goods made and work done." It will be seen that the duplication of value of the cotton product was obviated but the "value of stock used" included the value of the goods before the processes, and was thus increased out of proportion to the "value of work done." In ordinary statistics of manufactures this disproportion was not particularly noticeable, but when these figures were subjected to the usual mathematical treatment to arrive at the gross profits, it was found that, for reasons previously explained, the cost of production was greater than the selling price, and consequently there could be no gross profits, and *per se*, no net profits.

The "stock used" line under Print Works, Dye Works, and Bleacheries is too large, but the omission of the original value of goods subjected to processes would bring it to a nor-

mal condition. Owing to the lack of detail in the return of stock used in this industry, we are unable to separate the original value of goods from supplies in many cases. Again, in some instances, the value of the completed goods has been returned under "value of work done," and yet no basis is supplied for their correct elimination. This same anomalous condition will show itself under "Excess of Selling Price above Cost of Production," in which presentation Print Works, Dye Works, and Bleacheries is the only "minus" industry, that is, the only one in which the cost of production is greater than the selling price. In presenting the final results, for each industry, under the heading "Summary by Industries," we shall endeavor to rehabilitate this industry, by some well-supported estimates, and thus bring it to a plane that will allow of its direct comparison with other industries, and, if possible, determine its probable percentage of net profit.

#### SALARIES.

A classification of percentages in combination with the number of industries is appended.

CLASSIFICATION OF PERCENTAGES.		Number of Industries
Under 10 per cent, . . . . .		60
10 but under 20 per cent, . . . . .		1
No percentage given, . . . . .		3
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

In Printing, Publishing, and Bookbinding, 10.06 per cent of the cost of production is paid for salaries; this is due largely to the fact that newspapers are classed under this industry heading, and the salaries of editors, reporters, correspondents, etc., are included. In Electrical Apparatus and Appliances, 9.34 per cent of the cost of production is devoted to salaries, and in Whips, Lashes, and Stocks, 9.21 per cent. These are the highest percentages; the lowest are: Building (including Concrete Walks, Paving, etc.), 0.42 per cent; Trunks and Valises, 0.33 per cent; and Shipbuilding (including Awnings, Tents, and Decorations), 0.14 per cent.

## WAGES.

The relation of wages to the cost of production was considered in Part I. of the Bureau Report for 1889. In that investigation returns were secured from 1,615 establishments, the value of their annual product being \$147,832,513, or 21.91 per cent of the total value of product of all establishments in all industries. The facts in the present Part are based upon reports from 10,013 establishments, having an annual product of \$466,933,053, or 69.21 per cent of the total value of product of all establishments in all industries; that is, 6.2 times as many establishments and 3.2 times as much product are represented by the present investigation as compared with that of 1889.

The percentage classification is given below.

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	3
10 but under 20 per cent, . . . . .	12
20 but under 30 per cent, . . . . .	18
30 but under 40 per cent, . . . . .	14
40 but under 50 per cent, . . . . .	13
50 but under 60 per cent, . . . . .	3
60 but under 70 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

## COMPARISON. RELATION OF WAGES TO THE COST OF PRODUCTION.

INDUSTRIES.	NUMBER OF ESTABLISHMENTS CONSIDERED IN —	
	"Relation of Wages to the Cost of Production"	"Net Profits"
1 Agricultural implements, . . . . .	5	18
2 Arms and ammunition, . . . . .	6	22
3 Artificial teeth and dental work, . . . . .	3	120
4 Artisans' tools, . . . . .	26	77
5 Awnings, tents, and decorations, . . . . .	—	4
6 Boots and shoes, . . . . .	287	1,130
7 Boxes (paper and wooden), . . . . .	49	117
8 Brick, tiles, and sewer pipe, . . . . .	33	39
9 Brooms, brushes, and mops, . . . . .	15	35
10 Building, . . . . .	38	1,224
11 Burial cases, caskets, coffins, etc., . . . . .	4	31
12 Buttons and dress trimmings, . . . . .	7	9
13 Carpetings, . . . . .	10	17

Models and Patterns 64.96 per cent, Stone 58.54 per cent, and Arms and Ammunition 53.34 per cent, are the industries having the greatest proportion of cost of production paid for wages. The industries with the smallest proportion are: Oils and Illuminating Fluids, 8.19 per cent; Food Preparations (including Salt), 6.64 per cent; and Drugs and Medicines (including Perfumes, Toilet Articles, etc.), 6.33 per cent.

We have compared the results as regards the relation of wages to cost of production in 1,615 and 10,013 establishments, respectively, with the totals for all establishments in all industries and with each other. In the next table we supply a comparison by industries between the results as shown in Part I. of the Bureau Report for 1889 and the figures presented in this Part. We show, first, for each industry, the number of establishments, respectively, comprehended by what we will denominate the "Relation of Wages to the Cost of Production" investigation (drawn from Part I. of the Bureau Report for 1889), and the "Net Profits" investigation (contained in this Part). With similar subdivision and specification we present the value of goods made and work done, the cost of production, and the percentages of wage cost of total cost of production.

COMPARISON. RELATION OF WAGES TO THE COST OF PRODUCTION.

VALUE OF GOODS MADE AND WORK DONE PRESENTED IN—		COST OF PRODUCTION AS SHOWN IN—		PERCENTAGES OF WAGE COST OF TOTAL COST OF PRODUCTION DRAWN FROM—		
"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	
\$230,076	\$1,174,738	\$208,436	\$884,972	38.06	34.88	1
330,663	1,408,859	280,880	1,157,917	29.51	53.34	2
4,150	172,587	2,010	83,408	25.87	10.86	3
1,182,503	2,027,087	881,946	1,542,094	48.87	47.60	4
-	18,300	-	13,071	-	39.19	5
35,137,219	85,899,333	30,307,288	76,499,009	24.87	27.65	6
1,079,894	2,879,347	892,008	2,420,558	32.65	30.96	7
375,279	533,894	298,451	427,022	56.71	49.83	8
131,641	1,054,011	118,983	878,917	33.33	28.03	9
913,586	16,278,435	715,647	13,296,090	33.76	40.30	10
54,145	472,086	41,788	406,442	39.96	28.20	11
849,913	709,913	297,678	505,951	27.32	36.47	12
3,776,373	4,223,061	3,281,430	3,687,255	21.18	21.83	13



*Comparison. Relation of Wages to the Cost of Production — Continued.*

	INDUSTRIES.	NUMBER OF ESTABLISHMENTS CONSIDERED IN —	
		" Relation of Wages to the Cost of Production "	" Net Profits "
1	Carriages and wagons, . . . . .	41	496
2	Cement, kaolin, lime, and plaster, . . . . .	6	8
3	Charcoal and kindlers, . . . . .	—	1
4	Chemical preparations (compounded), . . . . .	1	13
5	Clocks and watches, . . . . .	1	17
6	Clothing, . . . . .	62	826
7	Concrete walks, paving, etc., . . . . .	2	3
8	Cooking, lighting, and heating apparatus, . . . . .	16	33
9	Cordage and twine, . . . . .	11	36
10	Corks, bungs, and taps, . . . . .	—	3
11	Cotton goods, . . . . .	78	137
12	Cotton, woollen, and other textiles, . . . . .	1	4
13	Crayons, pencils, crucibles, etc., . . . . .	2	4
14	Drugs and medicines, . . . . .	12	152
15	Dyestuffs, . . . . .	2	5
16	Earthen, plaster, and stone ware, . . . . .	5	16
17	Electrical apparatus and appliances, . . . . .	2	24
18	Electroplating, . . . . .	1	25
19	Emery and sand paper and cloth, etc., . . . . .	4	9
20	Fancy articles, . . . . .	1	10
21	Fertilizers, . . . . .	4	13
22	Fine arts and taxidermy, . . . . .	—	6
23	Fireworks and matches, . . . . .	—	3
24	Flax, hemp, and jute goods, . . . . .	3	7
25	Food preparations, . . . . .	74	682
26	Furniture, . . . . .	53	304
27	Gas and residual products, . . . . .	—	35
28	Glass, . . . . .	1	12
29	Glue, isinglass, and starch, . . . . .	7	22
30	Hair work (animal and human), . . . . .	2	22
31	Hose: rubber, linen, etc., . . . . .	—	2
32	Hosiery and knitt goods, . . . . .	15	32
33	Ink, mucilage, and paste, . . . . .	1	8
34	Ivory, bone, shell, and horn goods, etc., . . . . .	9	25
35	Jewelry burnishing and lapidary work, . . . . .	—	3
36	Leather, . . . . .	65	367
37	Linen, . . . . .	1	2
38	Liquors and beverages (not spirituous), . . . . .	11	25
39	Liquors: malt, distilled, and fermented, . . . . .	21	92
40	Lumber, . . . . .	34	217
41	Machines and machinery, . . . . .	85	402
42	Metals and metallic goods, . . . . .	137	1,131
43	Mixed textiles, . . . . .	5	9
44	Models and patterns, . . . . .	1	37
45	Musical instruments and materials, . . . . .	17	63
46	Oils and illuminating fluids, . . . . .	1	10
47	Paints, colors, and crude chemicals, . . . . .	4	13
48	Paper and paper goods, . . . . .	58	106

*Comparison. Relation of Wages to the Cost of Production — Continued.*

VALUE OF GOODS MADE AND WORK DONE PRESENTED IN —		COST OF PRODUCTION AS SHOWN IN —		PERCENTAGES OF WAGE COST OF TOTAL COST OF PRODUCTION DRAWN FROM —		
"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	
\$802,601	\$5,027,457	\$640,706	\$3,968,263	45.91	41.23	1
110,665	117,995	94,469	77,792	31.70	26.16	2
-	2,000	-	768	-	-	3
4,000	854,752	3,259	740,431	9.27	11.94	4
39,600	2,790,399	41,848	2,248,340	77.06	61.09	5
4,201,758	15,497,247	3,533,706	12,209,485	22.97	24.21	6
7,390	24,810	6,375	21,650	71.22	54.95	7
985,251	1,913,119	730,496	1,440,062	51.24	48.94	8
2,112,590	4,505,177	1,823,406	4,046,471	13.97	14.63	9
-	94,000	-	72,552	-	24.65	10
29,997,242	53,913,920	28,302,811	51,617,956	30.33	28.84	11
792,848	2,394,583	732,052	2,201,361	32.64	29.00	12
15,480	26,580	10,966	21,936	54.71	51.65	13
52,912	1,255,564	24,833	732,388	23.94	6.94	14
120,370	497,398	72,505	469,848	20.60	10.79	15
149,240	375,263	97,620	270,243	66.09	57.63	16
188,649	624,819	132,682	525,042	45.60	42.39	17
5,000	184,457	2,909	113,453	27.50	50.50	18
185,436	396,436	132,283	272,863	26.70	26.84	19
36,000	55,895	18,535	33,831	56.65	52.77	20
980,875	2,757,887	687,368	2,314,158	8.57	10.45	21
-	21,368	-	11,689	-	37.98	22
-	66,912	-	26,799	-	50.61	23
384,665	1,460,623	289,607	1,151,137	22.14	19.91	24
2,776,378	47,502,916	2,839,967	41,936,039	12.44	6.64	25
1,815,729	8,992,466	1,629,074	7,761,522	37.03	35.30	26
-	3,014,136	-	1,883,649	-	24.38	27
10,091	565,584	7,437	454,890	61.76	48.75	28
463,978	938,231	430,507	878,049	14.97	16.82	29
294,450	352,554	283,248	326,451	13.19	13.81	30
-	781,480	-	307,641	-	6.89	31
2,915,072	4,013,464	2,430,781	3,439,007	31.65	28.77	32
19,512	83,218	14,834	58,954	24.57	23.94	33
1,042,064	1,406,143	665,267	967,806	22.19	25.04	34
-	40,000	-	36,311	-	22.12	35
5,055,418	21,288,324	4,675,586	19,077,167	14.38	17.07	36
306,399	730,969	304,824	753,382	32.71	24.96	37
97,698	245,846	60,135	166,006	35.74	28.96	38
963,765	5,248,579	654,656	3,741,754	13.46	13.33	39
269,243	1,911,859	220,960	1,599,544	24.98	21.15	40
3,696,128	14,749,668	2,754,123	11,847,998	46.68	43.36	41
6,981,798	28,046,144	5,503,500	22,763,026	35.93	34.03	42
653,528	908,788	646,764	799,923	15.77	17.48	43
10,000	175,891	3,141	109,172	61.51	64.96	44
1,326,049	4,451,212	972,944	3,576,729	40.08	39.89	45
100,000	1,374,543	97,351	1,363,764	5.92	8.19	46
211,747	652,173	163,741	566,608	16.60	12.87	47
11,033,635	17,253,026	9,487,326	15,444,746	18.84	17.69	48

*Comparison. Relation of Wages to the Cost of Production — Concluded*

	INDUSTRIES.	NUMBER OF ESTABLISHMENTS CONSIDERED IN —	
		"Relation of Wages to the Cost of Production"	"Net Profits"
1	Perfumes, toilet articles, etc., . . . . .	1	4
2	Photographs and photographic materials, . . . . .	4	115
3	Polishes and dressing, . . . . .	6	27
4	Printing, publishing, and bookbinding, . . . . .	1	399
5	Print works, dye works, and bleacheries, . . . . .	—	61
6	Railroad construction and equipment, . . . . .	1	19
7	Rubber and elastic goods, . . . . .	6	22
8	Salt, . . . . .	1	2
9	Scientific instruments and appliances, . . . . .	5	22
10	Shipbuilding, . . . . .	—	127
11	Silk and silk goods, . . . . .	3	7
12	Sporting and athletic goods, . . . . .	4	13
13	Stone, . . . . .	25	193
14	Straw and palm leaf goods, . . . . .	5	19
15	Tallow, candles, soap, and grease, . . . . .	11	73
16	Tobacco, snuff, and cigars, . . . . .	58	124
17	Toys and games (children's), . . . . .	4	11
18	Trunks and valises, . . . . .	2	12
19	Whips, lashes, and stocks, . . . . .	8	26
20	Wooden goods, . . . . .	53	27
21	Woollen goods, . . . . .	69	141
22	Worsted goods, . . . . .	8	17

RECAPITULATION. RELATION OF WAGES TO THE COST OF PRODUCTION.  
ALL INDUSTRIES.

POINTS COMPARED.	"Relation of Wages to the Cost of Production"	"Net Profits"
Establishments, . . . . .	1,615	19,927
Value of goods made and work done, . . . . .	\$147,832,513	\$406,833,173
Cost of production, . . . . .	\$126,703,981	\$406,462,131
Percentages of wage cost of total cost of production, . . . . .	26.48	25.66

It must be borne in mind that the column headings "Relation of Wages to the Cost of Production" and "Net Profits," in both the table and recapitulation, are used simply to designate and thus separate two investigations in the mind of the reader. The small variation between the two percentages indicating the proportion of wage cost of total cost of production (26.48 and 25.66) or only 0.82 per cent, must be accepted as proving the accuracy and reliability of both investigations. No stronger

*Comparison. Relation of Wages to the Cost of Production — Concluded.*

VALUE OF GOODS MADE AND WORK DONE PRESENTED IN —		COST OF PRODUCTION AS SHOWN IN —		PERCENTAGES OF WAGE COST OF TOTAL COST OF PRODUCTION DRAWN FROM —		
"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	"Relation of Wages to the Cost of Production"	"Net Profits"	
\$5,289	\$376,000	\$3,343	\$251,253	27.37	4.57	1
93,023	560,894	63,080	366,647	40.99	39.61	2
250,730	1,000,096	197,048	727,089	11.10	10.28	3
88,030	10,504,447	66,827	7,122,104	38.95	44.23	4
-	12,951,768	-	16,647,080	-	14.84	5
30,000	1,191,899	20,071	1,105,949	49.82	38.40	6
2,995,786	8,781,665	2,197,152	7,459,254	25.23	21.11	7
1,430	2,030	628	380	52.23	-	8
75,677	827,808	51,178	678,619	46.60	34.81	9
-	879,631	-	652,111	-	38.54	10
500,627	1,983,787	478,186	1,769,739	30.45	24.51	11
59,350	176,680	32,772	136,161	39.87	31.55	12
729,487	4,076,233	501,949	3,224,784	56.47	58.54	13
566,967	3,751,953	482,138	3,259,098	22.57	27.21	14
727,493	2,273,505	674,786	1,935,298	9.00	10.59	15
1,119,803	1,901,379	980,431	1,643,401	34.66	35.57	16
184,207	311,407	154,294	260,923	51.74	45.07	17
86,288	161,065	69,480	127,292	21.67	27.55	18
119,175	591,622	99,614	346,044	23.17	31.14	19
1,032,018	3,066,771	759,419	2,443,952	34.17	38.19	20
12,318,433	26,834,565	10,167,270	22,849,959	21.95	20.72	21
2,068,064	8,288,552	1,768,208	7,217,243	21.04	27.95	22

statistical proof, as regards the manufacturing industries of Massachusetts, could be expected. It may be stated, therefore, as a fact, founded upon statistics covering 69.21 per cent of the total product, that, in the manufacturing industries of Massachusetts, the wage cost of production forms 25.66 per cent of the total cost of production.

It should be borne in mind that such a figure is of the nature of an average. An average is an attempt to generalize as to a large number of variable units. As such a generalization it has its uses; but its value as a correct generalization will depend upon the proportion which the number of units upon which it is based bears to the whole number of units of that class. That is to say, an average based upon 75 per cent of the product in a given industry would more accurately portray general conditions than if it were based upon 10 per cent.

Whenever in the foregoing table the percentage of wage cost of total cost, as shown in the investigation upon the "Relation

of Wages to the Cost of Production," varies considerably from that shown in the investigation as to "Net Profits" the percentage brought out in the latter may be accepted as the more accurate so far as relates to the industry as a whole because it is based in every case upon a larger percentage of product.\*

We now present the customary table in which the industries are brought under a percentage classification. In the investigation for 1889 the whole number of industries, 83, were presented, and, to allow of comparisons, the "Net Profits" portion, in this table only, is given for 83 industries.

CLASSIFICATION OF PERCENTAGES.	"Relation of Wages to the Cost of Production"	"Net Profits"
Under 10 per cent, . . . . .	4	5
10 but under 20 per cent, . . . . .	10	16
20 but under 30 per cent, . . . . .	21	24
30 but under 40 per cent, . . . . .	18	16
40 but under 50 per cent, . . . . .	8	10
50 but under 60 per cent, . . . . .	7	8
60 but under 70 per cent, . . . . .	3	2
70 but under 80 per cent, . . . . .	2	-
80 but under 90 per cent, . . . . .	-	-
90 but under 100 per cent, . . . . .	-	-
100 per cent, . . . . .	-	-
No percentage given, . . . . .	10	2
WHOLE NUMBER OF INDUSTRIES, . . . . .	83	83

With but slight variations, the industries keep well in line as regards the percentage classification; "60 but under 70 per cent" loses an industry; "30 but under 40 per cent" and "70 but under 80 per cent" each loses two industries. The gains are due, no doubt, to the lifting of eight industries from the "no percentage given" line into direct comparison.

In order to show the arrangement of the industries by name under the various percentage classification heads, the following

\* The particular value of the investigation upon the "Relation of Wages to the Cost of Production," contained in the Bureau Report for 1889, lay in the fact that it not only presented industry percentages of wage cost of total cost but it also showed the articles in each industry from which the industry average was derived. As the percentage of wage cost of total cost varies with the qualities and kinds of articles included under the same industry classification, the industry average could thus be compared with the percentages for a large number of selected articles of different kinds and qualities, and the presentation in the Report for 1889 renders such a comparison possible by means of data covering a comparatively wide field.

text-tabular presentation is submitted, in which, under each percentage head, the industries at the *left* correspond to the "Relation of Wages to the Cost of Production" investigation, while the industries at the *right* conform to the "Net Profits" investigation :

"RELATION OF WAGES TO THE COST  
OF PRODUCTION."

"NET PROFITS."

*Under 10 per cent.*

Chemical Preparations (Compound-  
ed).  
Fertilizers.  
Oils and Illuminating Fluids.  
Tallow, Candles, Soap, and Grease.

Drugs and Medicines.  
Food Preparations.  
Hose: Rubber, Linen, etc.  
Oils and Illuminating Fluids.  
Perfumes, Toilet Articles, etc.

*10 per cent but under 20 per cent.*

Cordage and Twine.  
Food Preparations.  
Glue, Isinglass, and Starch.  
Hair Work (Animal and Human).  
Leather.  
Liquors: Malt, Distilled, and Fer-  
mented.  
Mixed Textiles.  
Paints, Colors, and Crude Chemicals.  
Paper and Paper Goods.  
Polishes and Dressing.

Artificial Teeth and Dental Work.  
Chemical Preparations (Compound-  
ed).  
Cordage and Twine.  
Dyestuffs.  
Fertilizers.  
Flax, Hemp, and Jute Goods.  
Glue, Isinglass, and Starch.  
Hair Work (Animal and Human).  
Leather.  
Liquors: Malt, Distilled, and Fer-  
mented.  
Mixed Textiles.  
Paints, Colors, and Crude Chemi-  
cals.  
Paper and Paper Goods.  
Polishes and Dressing.  
Print Works, Dye Works, and Bleach-  
eries.  
Tallow, Candles, Soap, and Grease.

*20 per cent but under 30 per cent.*

Arms and Ammunition.  
Artificial Teeth and Dental Work.  
Boots and Shoes.  
Buttons and Dress Trimmings.  
Carpetings.  
Clothing.  
Drugs and Medicines.  
Dyestuffs.  
Electroplating.  
Emery and Sand Paper and Cloth,  
etc.

Boots and Shoes.  
Brooms, Brushes, and Mops.  
Burial Cases, Caskets, Coffins, etc.  
Carpetings.  
Cement, Kaolin, Lime, and Plaster.  
Clothing.  
Corks, Bungs, and Taps.  
Cotton Goods.  
Cotton, Woollen, and Other Textiles.  
Emery and Sand Paper and Cloth,  
etc.

"RELATION OF WAGES TO THE COST  
OF PRODUCTION."

"NET PROFITS."

*20 per cent but under 30 per cent — Concluded.*

Flax, Hemp, and Jute Goods.  
Ink, Mucilage, and Paste.  
Ivory, Bone, Shell, and Horn Goods,  
etc.  
Lumber.  
Perfumes, Toilet Articles, etc.  
Rubber and Elastic Goods.  
Straw and Palm Leaf Goods.  
Trunks and Valises.  
Whips, Lashes, and Stocks.  
Woollen Goods.  
Worsted Goods.

Gas and Residual Products.  
Hosiery and Knit Goods.  
Ink, Mucilage, and Paste.  
Ivory, Bone, Shell, and Horn Goods,  
etc.  
Jewelry Burnishing and Lapidary  
Work.  
Linen.  
Liquors and Beverages (Not Spirit-  
uous).  
Lumber.  
Rubber and Elastic Goods.  
Silk and Silk Goods.  
Straw and Palm Leaf Goods.  
Trunks and Valises.  
Woollen Goods.  
Worsted Goods.

*30 per cent but under 40 per cent.*

Agricultural Implements.  
Boxes (Paper and Wooden).  
Brooms, Brushes, and Mops.  
Building.  
Burial Cases, Caskets, Coffins, etc.  
Cement, Kaolin, Lime, and Plaster.  
Cotton Goods.  
Cotton, Woollen, and Other Tex-  
tiles.  
Furniture.  
Hosiery and Knit Goods.  
Linen.  
Liquors and Beverages (Not Spirit-  
uous).  
Metals and Metallic Goods.  
Printing, Publishing, and Bookbind-  
ing.  
Silk and Silk Goods.  
Sporting and Athletic Goods.  
Tobacco, Snuff, and Cigars.  
Wooden Goods.

Agricultural Implements.  
Awnings, Tents, and Decorations.  
Boxes (Paper and Wooden).  
Buttons and Dress Trimmings.  
Fine Arts and Taxidermy.  
Furniture.  
Metals and Metallic Goods.  
Musical Instruments and Materials.  
Photographs and Photographic Ma-  
terials.  
Railroad Construction and Equip-  
ment.  
Scientific Instruments and Appli-  
ances.  
Shipbuilding.  
Sporting and Athletic Goods.  
Tobacco, Snuff, and Cigars.  
Whips, Lashes, and Stocks.  
Wooden Goods.

*40 per cent but under 50 per cent.*

Artisans' Tools.  
Carriages and Wagons.  
Electrical Apparatus and Appli-  
ances.

Artisans' Tools.  
Brick, Tiles, and Sewer Pipe.  
Building.  
Carriages and Wagons.

"RELATION OF WAGES TO THE COST  
OF PRODUCTION."

"NET PROFITS."

*40 per cent but under 50 per cent — Concluded.*

Machines and Machinery.	Cooking, Lighting, and Heating Apparatus.
Musical Instruments and Materials.	Electrical Apparatus and Appliances.
Photographs and Photographic Materials.	Glass.
Railroad Construction and Equipment.	Machines and Machinery.
Scientific Instruments and Appliances.	Printing, Publishing, and Bookbinding.
	Toys and Games (Children's).

*50 per cent but under 60 per cent.*

Brick, Tiles, and Sewer Pipe.	Arms and Ammunition.
Cooking, Lighting, and Heating Apparatus.	Concrete Walks, Paving, etc.
Crayons, Pencils, Crucibles, etc.	Crayons, Pencils, Crucibles, etc.
Fancy Articles.	Earthen, Plaster, and Stone Ware.
Salt.	Electroplating.
Stone.	Fancy Articles.
Toys and Games (Children's).	Fireworks and Matches.
	Stone.

*60 per cent but under 70 per cent.*

Earthen Plaster, and Stone Ware.	Clocks and Watches.
Glass.	Models and Patterns.
Models and Patterns.	

*70 per cent but under 80 per cent.*

Clocks and Watches.
Concrete Walks, Paving, etc.

*No percentage given.*

Awnings, Tents, and Decorations.	Charcoal and Kindlers.
Charcoal and Kindlers.	Salt.
Corks, Bungs, and Taps.	
Fine Arts and Taxidermy.	
Fireworks and Matches.	
Gas and Residual Products.	
Hose: Rubber, Linen, etc.	
Jewelry Burnishing and Lapidary Work.	
Print Works, Dye Works, and Bleacheries.	
Shipbuilding.	

An inspection of the various industries, under the different percentage heads, will show the movement of the industries



from one percentage classification to another in the "Net Profits" presentation (right hand column) as compared with the "Relation of Wages to the Cost of Production" presentation (left hand column).

Comparing the two presentations as regards highest and lowest percentages of wage cost we secure the following results by industries :

"RELATION OF WAGES TO THE COST OF PRODUCTION."		"NET PROFITS."	
<i>Highest.</i>	Percent-ages	<i>Highest.</i>	Percent-ages
Clocks and watches, . . .	77.06	Models and patterns, . . .	64.96
Concrete walks, paving, etc., . .	71.22	Clocks and watches, . . .	61.09
Earthen, plaster, and stone ware, .	66.09	Stone, . . . . .	58.84
<i>Lowest.</i>	Percent-ages	<i>Lowest.</i>	Percent-ages
Tallow, candles, soap, and grease, .	9.00	Hose: rubber, linen, etc., . .	6.89
Fertilizers, . . . . .	8.57	Food preparations, . . . . .	6.64
Oils and illuminating fluids, . . .	5.92	Perfumes, toilet articles, etc., .	4.57

The question of wages is still further considered, hereinafter, under "Relation of Cost of Production to Selling Price," "Comparison of Earnings and Profits," and in the "Ultimate Tables" in which latter the grand results of the seven presentations for each industry and all industries, or 455 in all, are brought into a consideration of the financial relations between employer and employé, and carried to a statistical extreme never before reached.

#### RENT.

In Artificial Teeth and Dental Work, 34.49 per cent of the total cost of production is expended for rent; in Photographs and Photographic Materials, 14.51 per cent; and in Fancy Articles (including Fine Arts and Taxidermy), 11.62 per cent. These are the highest percentages. The lowest proportions are found in Gas and Residual Products, and Glue, Isinglass, and Starch, each 0.09 per cent; Cotton Goods, 0.07 per cent; and Railroad Construction and Equipment, 0.03 per cent.

A classification of industries by percentages follows :

CLASSIFICATION OF PERCENTAGES.	Number of Industries
Under 10 per cent, . . . . .	60
10 but under 20 per cent, . . . . .	2
30 but under 40 per cent, . . . . .	1
No percentage given, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

### TAXES.

The greatest proportion of total cost of production expended for taxes is shown in Gas and Residual Products with 4.56 per cent ; Electrical Apparatus and Appliances, 2.34 per cent ; and Artificial Teeth and Dental Work, 1.91 per cent. The lowest percentages are found in Trunks and Valises, 0.17 ; Boots and Shoes, 0.16 ; and Hair Work (Animal and Human), 0.14 per cent. In all the industries, the percentage of expenditure for taxes is less than five per cent of the total cost of production.

### INSURANCE.

In Furniture, the outlay for insurance forms 3.10 per cent of the total cost of production ; in Sporting and Athletic Goods, 2.79 per cent ; and in Burial Cases, Caskets, Coffins, etc., 1.42 per cent. The lowest proportion is found in Print Works, Dye Works, and Bleacheries, and Silk and Silk Goods (including Buttons and Dress Trimmings), each with 0.13 per cent ; in Hair Work (Animal and Human), and Oils and Illuminating Fluids, each with 0.05 per cent ; and Gas and Residual Products, 0.01 per cent. In all the industries but one, the outlay for insurance is less than four per cent of the total cost of production, and the percentage for that industry is not given.

### FREIGHT.

In Chemical Preparations, Compounded (including Fertilizers), the charges for freight reach 10.93 per cent of the total cost of production ; in Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster), 6.47 per cent ; and in Brick, Tiles, and Sewer Pipe, 5.44 per cent. In some industries, the expenditure for freight forms a very small proportion of the total cost of production, being but 0.11 per cent in Scientific Instruments and Appliances ; in Printing, Publish-

ing, and Bookbinding, 0.02 per cent; and in Shipbuilding (including Awnings, Tents, and Decorations), 0.01 per cent. We have seen in one industry that the charges for freight are more than 10 per cent of the total cost of production; in none of the remaining 63 industries does it exceed seven per cent.

#### NEW EQUIPMENT.

By "New Equipment" is meant new fixtures, machinery, implements, and tools, needed to take the place of such as may be worn out or injured, or to provide for the employment of additional employes. The proportion of total cost of production expended for such purposes reaches 8.62 per cent in the case of Gas and Residual Products; in Scientific Instruments and Appliances, 2.47 per cent; and in Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.), 1.98 per cent. The lowest proportion is found in Boxes (Paper and Wooden), 0.03 per cent; Carriages and Wagons, and Cooking, Lighting, and Heating Apparatus, each 0.02 per cent; and Building (including Concrete Walks, Paving, etc.), Clothing, and Wooden Goods (including Corks, Bungs, and Taps), each 0.01 per cent. In no instance, as regards 34 industries, does the expenditure for new equipment exceed nine per cent of the total cost of production, and in the case of five of these industries it is less than one one-hundredth of one per cent. For 30 industries this item of cost of production is not reported.

#### REPAIRS.

This item of cost of production covers repairs of all kinds on buildings, fixtures, machinery, implements, and tools. It reaches 8.47 per cent of the total cost of production in the industry known as Glue, Isinglass, and Starch; in Liquors: Malt; Distilled, and Fermented, 5.61 per cent; and in Worsted Goods, 3.48 per cent. The lowest proportion is found in Boots and Shoes, 0.15 per cent; Clothing, 0.14 per cent; and Brooms, Brushes, and Mops, 0.03 per cent. In the case of two industries the percentage is not given, and in none of the remaining 62 industries does it rise above nine per cent of the total cost of production.

#### OTHER EXPENSES.

By "Other Expenses" is meant miscellaneous or sundry outlays not included under preceding designations of expense.

They are reported by only 26 industries out of 64, in the case of 38 industries no return being made for such an item of cost of production. As regards the 26 industries reporting, the percentages are small, in two industries they being less than one one-hundredth of one per cent. The highest proportion is found in Printing, Publishing, and Bookbinding, 1.30 per cent; Woollen Goods, 0.71 per cent; and Liquors and Beverages (Not Spirituous), 0.58 per cent. The lowest proportion is found in Boxes (Paper and Wooden), and Chemical Preparations, Compounded (including Fertilizers), each 0.03 per cent; Photographs and Photographic Materials, 0.02 per cent; and Paper and Paper Goods, 0.01 per cent.

As in the consideration of the various items of expenditure entering into the total cost of production several tables have been omitted that would have shown the industries arranged in accordance with the usual percentage classification, we produce here a table showing all the items of expense with the industries classified under each as regards percentages.

CLASSIFICATION OF PERCENTAGES.	NUMBER OF INDUSTRIES									
	Stock Used	Salaries	Wages	Rent	Taxes	Insurance	Freight	New Equipment	Repairs	Other Expenses
Under 10 per cent, . . .	-	60	3	60	64	63	63	34	62	26
10 but under 20 per cent, .	-	1	12	2	-	-	1	-	-	-
20 but under 30 per cent, .	1	-	18	-	-	-	-	-	-	-
30 but under 40 per cent, .	9	-	14	1	-	-	-	-	-	-
40 but under 50 per cent, .	6	-	13	-	-	-	-	-	-	-
50 but under 60 per cent, .	17	-	3	-	-	-	-	-	-	-
60 but under 70 per cent, .	13	-	1	-	-	-	-	-	-	-
70 but under 80 per cent, .	12	-	-	-	-	-	-	-	-	-
80 but under 90 per cent, .	5	-	-	-	-	-	-	-	-	-
90 but under 100 per cent, .	1	-	-	-	-	-	-	-	-	-
100 per cent, . . . . .	-	-	-	-	-	-	-	-	-	-
No percentage given, . . .	-	3	-	1	-	1	-	30	2	38
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64	64	64	64	64	64	64	64	64

We see that one industry pays 90 but under 100 per cent of the total cost of production for stock used; one industry pays 10 but under 20 per cent for salaries; one industry pays 60 but under 70 per cent for wages; one industry pays 30 but under 40 per cent for rent; and one industry pays 10 but under 20 per cent for freight. These are the highest percentages for the items of expense considered. The names of the industries

expending these percentages may be easily ascertained by referring to pages 477-479, *ante*.

We now reproduce from the "All Industries" presentation on page 398, *ante*, the section relating to "Cost of Production" which shows the percentages for each item of expense for 10,013 establishments.

COST OF PRODUCTION. ALL INDUSTRIES. [10,013 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	67.67
Salaries, . . . . .	1.98
Wages, . . . . .	25.66
Rent, . . . . .	0.85
Taxes, . . . . .	0.64
Insurance, . . . . .	0.38
Freight, . . . . .	1.46
New equipment, . . . . .	0.28
Repairs, . . . . .	0.93
Other expenses, . . . . .	0.15
TOTAL, . . . . .	100.00

No more expressive analysis can be made of this presentation than to say it means that a Massachusetts manufacturer, on the average, for each \$100 worth of completed product (ready for sale but excluding profit), expends \$67.67 for stock (including raw or manufactured materials), \$1.98 for salaries, \$25.66 for wages, 85 cents for rent, 64 cents for taxes, 38 cents for insurance, \$1.46 for freight, 28 cents for new equipment, 93 cents for repairs, and 15 cents for other expenses, these items aggregating \$100, or 100 per cent, if the items are considered as percentages instead of dollars and cents.

### RELATION OF COST OF PRODUCTION TO SELLING PRICE.

In the consideration of "Cost of Production" we remarked that profits did not enter into the composition of the result there secured. In accordance with its name, it included only those items of expenditure needed to bring the article to the

point where it was *ready for sale*. Having reached that point the question of profits becomes a factor. Expenses do not cease when goods are ready for sale, so that if a manufacturer adds a certain sum to the cost of his goods and calls it profit, that profit will be reduced by the amount of the selling expenses, as well as by interest on capital, depreciation of plant, losses by bad debts, etc. In order to make a necessary distinction between *the profit added* to the cost of production and *the profit remaining* after selling expenses, etc., are paid, it has been customary to call "the profit added" by the name of **gross profit** and "the profit remaining" by the name of **net profit**.

We have entered into this explanation of the two kinds of profit in order that they may not be confounded. In the following table all the items that were found under "Cost of Production" again appear, but a new factor is introduced. This factor is the "excess of selling price above cost of production," which is the sum added to the cost of production to furnish profit and pay selling expenses, interest, depreciation, etc.; in other words, "excess of selling price above cost of production" is the same as **gross profit**.

As this gross profit has been added to the cost of production their combination forms a new total which becomes 100 per cent. It is evident that the relations of stock used, salaries, wages, rent, etc., will be different as regards "Selling Price" (that is, cost of production plus gross profit) than as regards "Cost of Production." As selling price is larger (as the "gross profit" is added) than cost of production, the percentages will run lower; that is, stock used will form a smaller proportion of selling price than of cost of production. In the case of salaries, wages, rent, etc., this same result will follow.

It is more natural for the general public to figure profits on selling price than on cost of production. The selling price is always known to the public but the cost of production is, as a rule, known only to the manufacturer. To this cost of production he has added a certain percentage for (gross) profit, that is, he has "marked up" his goods. For instance, if the cost of production of a certain article was \$20 and the manufacturer added 10 per cent for (gross) profit,

the selling price would become \$22. We will assume that selling expenses and other outlays after manufacture cost him five cents on each dollar's worth of goods sold; then his net profit would be 90 cents, equivalent to 4.50 per cent of the cost of production, and, naturally, as explained, a smaller percentage, or 4.09, of the selling price.

With the preceding explanation we think the reader can readily comprehend the subjoined table. But one other point seems to require elucidation. The "excess of selling price above cost of production," or **gross profit**, has a certain relation to the capital invested; that is, the money owned or borrowed that was used in carrying on the establishment that manufactured the goods. • This **gross profit** is equivalent to a certain percentage of the capital invested and it is these

RECAPITULATION. RELATION OF COST OF PRODUCTION TO SELLING PRICE. PERCENTAGES.

	INDUSTRIES.	Stock Used	Salaries	Wages	Rent
1	Agricultural implements, . . . . .	39.26	3.80	26.27	0.79
2	Arms and ammunition, . . . . .	31.07	3.24	43.84	0.60
3	Artificial teeth and dental work, . . . . .	24.72	-	5.25	16.67
4	Artisans' tools, . . . . .	29.04	5.31	36.21	0.67
5	Boots and shoes, . . . . .	61.71	1.10	24.62	0.50
6	Boxes (paper and wooden), . . . . .	50.86	1.24	26.02	1.38
7	Brick, tiles, and sewer pipe, . . . . .	23.48	2.53	69.91	0.58
8	Brooms, brushes, and mops, . . . . .	55.08	2.64	23.38	0.88
9	Building (including concrete walks, paving, etc.), . . . . .	45.93	0.34	32.94	1.20
10	Burial cases, caskets, coffins, etc., . . . . .	52.91	4.33	24.23	1.16
11	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	62.87	1.44	20.79	0.26
12	Carriages and wagons, . . . . .	41.59	0.71	32.54	1.65
13	Charcoal and kindlers (including fireworks and matches), . . . . .	19.07	-	19.68	-
14	Chemical preparations, compounded (including fertilizers), . . . . .	61.88	1.30	9.14	0.11
15	Clothing, . . . . .	54.77	1.62	19.07	2.64
16	Cooking, lighting, and heating apparatus, . . . . .	30.89	2.90	36.84	1.44
17	Cordage and twine, . . . . .	69.46	2.29	13.14	0.34
18	Cotton goods, . . . . .	59.39	1.46	27.61	0.07
19	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	48.71	2.53	3.82	3.15
20	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	23.11	3.20	35.70	0.95
21	Electrical apparatus and appliances, . . . . .	34.80	7.85	35.63	2.94
22	Electroplating (including jewelry burnishing and lapidary work), . . . . .	27.74	4.18	29.10	4.79

"equivalents" that are given in the right hand column of the table. In the case of each industry, the first 11 columns, when aggregated, form 100 per cent. The twelfth column, or "percentage of excess of selling price above cost of production (gross profit) of capital invested" does not enter into the composition of this 100 per cent (or selling price) but shows the relation of "gross profit" to capital invested. It is thus seen that the profit made by a manufacturer (whether gross or net) has three relations; it forms a certain percentage of the cost of production, a different (and smaller) percentage of the selling price, and another relation (which can be expressed by percentages) to capital invested.

In the first 11 columns of the following recapitulation, as explained, the percentages are figured upon selling price:

RECAPITULATION. RELATION OF COST OF PRODUCTION TO SELLING PRICE. PERCENTAGES.

Taxes	Insurance	Freight	New Equipment	Repairs	Other Expenses	Excess of Selling Price above Cost of Production	Percentages of Excess of Selling Price above Cost of Production of Capital Invested	
0.85	0.22	3.90	-	0.24	-	24.67	13.95	1
1.11	0.52	0.76	0.11	0.04	-	17.61	11.12	2
0.92	0.20	0.13	-	0.44	-	51.67	117.36	3
0.88	0.19	2.04	0.26	1.47	-	23.93	14.27	4
0.14	0.19	0.52	0.07	0.14	0.07	10.94	35.39	5
0.43	0.37	3.00	0.03	0.72	0.02	15.93	25.18	6
1.44	0.56	4.36	0.70	1.38	0.15	19.91	11.81	7
0.41	0.40	0.58	-	0.02	-	16.61	37.57	8
0.18	0.15	0.69	0.01	0.13	0.12	18.31	61.94	9
0.55	1.22	0.62	-	0.80	0.42	13.91	24.04	10
0.71	0.12	0.49	1.46	0.73	-	11.13	9.62	11
0.42	0.46	1.18	0.01	0.37	-	21.07	30.90	12
0.11	-	0.78	-	0.36	-	60.00	213.67	13
0.20	0.28	9.24	-	2.37	0.03	15.45	15.35	14
0.16	0.16	0.25	0.01	0.11	-	21.21	49.87	15
0.42	0.34	2.04	0.02	0.38	-	24.73	31.09	16
0.70	0.94	1.15	0.21	1.59	-	10.18	12.17	17
1.70	0.34	2.33	0.86	1.84	0.14	4.26	2.25	18
0.43	0.23	1.23	-	0.19	-	39.71	91.37	19
0.53	0.59	4.57	-	1.91	-	29.44	35.97	20
1.97	0.41	0.24	-	0.19	-	15.97	5.17	21
0.29	0.12	0.22	-	0.28	-	33.28	75.00	22

\* Less than one one-hundredth of one per cent.



*Recapitulation. Relation of Cost of Production to Selling Price.  
Percentages — Concluded.*

	INDUSTRIES.	Stock Used	Sal- aries	Wages	Rent
1	Fancy articles (including fine arts and taxidermy), . . . . .	20.15	1.86	23.85	6.85
2	Flax, hemp, and jute goods (including linen), . . . . .	62.47	1.46	19.05	0.09
3	Food preparations (including salt), . . . . .	80.16	0.39	5.86	0.46
4	Furniture, . . . . .	47.48	1.71	30.46	2.02
5	Gas and residual products, . . . . .	31.28	4.64	15.23	0.06
6	Glass, . . . . .	30.86	5.09	39.21	3.01
7	Glue, isinglass, and starch, . . . . .	66.68	0.83	15.74	0.09
8	Hair work (animal and human), . . . . .	74.75	1.47	12.78	1.97
9	Hosiery and knit goods, . . . . .	55.01	2.11	24.65	0.13
10	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	40.60	-	22.08	2.12
11	Ivory, bone, shell, and horn goods, etc., . . . . .	46.41	2.34	17.21	0.48
12	Leather, . . . . .	70.75	0.65	15.30	0.52
13	Liquors and beverages (not spirituous), . . . . .	37.80	3.39	19.55	3.32
14	Liquors: malt, distilled, and fermented, . . . . .	58.13	2.32	9.50	0.75
15	Lumber, . . . . .	59.44	0.59	17.09	0.40
16	Machines and machinery, . . . . .	36.89	4.80	34.83	1.08
17	Metals and metallic goods (including clocks and watches), . . . . .	45.21	2.52	29.58	0.96
18	Models and patterns, . . . . .	15.08	0.67	40.32	5.38
19	Musical instruments and materials, . . . . .	41.31	3.40	32.06	1.76
20	Oils and illuminating fluids, . . . . .	84.15	1.48	8.13	0.38
21	Paints, colors, and crude chemicals (including dye- stuffs), . . . . .	67.92	4.65	10.75	0.43
22	Paper and paper goods, . . . . .	61.70	2.55	15.84	0.44
23	Photographs and photographic materials, . . . . .	25.95	1.57	25.39	9.48
24	Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	51.87	5.15	10.60	1.00
25	Printing, publishing, and bookbinding, . . . . .	26.38	6.82	29.99	2.59
26	Print works, dye works, and bleacheries, . . . . .	104.35	1.76	19.07	0.24
27	Railroad construction and equipment, . . . . .	51.33	2.33	35.63	0.03
28	Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	61.75	1.42	16.09	0.31
29	Scientific instruments and appliances, . . . . .	44.22	4.82	28.54	1.33
30	Shipbuilding (including awnings, tents, and decorations), . . . . .	42.27	0.10	23.56	2.29
31	Silk and silk goods (including buttons and dress trim- mings), . . . . .	56.65	2.34	22.86	0.23
32	Sporting and athletic goods, . . . . .	45.44	1.61	24.31	2.37
33	Stone, . . . . .	25.66	1.87	46.31	0.62
34	Straw and palm leaf goods, . . . . .	56.79	3.20	23.64	0.40
35	Tallow, candles, soap, and grease, . . . . .	72.70	1.06	9.02	0.41
36	Tobacco, snuff, and cigars, . . . . .	49.06	3.99	30.75	1.71
37	Toys and games (children's), . . . . .	36.43	4.06	37.76	1.37
38	Trunks and valises, . . . . .	51.66	0.26	21.78	3.52
39	Whips, lashes, and stocks, . . . . .	31.87	5.39	18.21	1.23
40	Wooden goods (including corks, bungs, and taps), . . . . .	41.36	1.73	30.10	2.35
41	Woollen goods, . . . . .	60.95	1.51	17.64	0.45
42	Worsted goods, . . . . .	56.86	0.76	24.33	0.35

*Recapitulation. Relation of Cost of Production to Selling Price.*  
*Percentages — Concluded.*

Taxes	Insurance	Freight	New Equipment	Repairs	Other Expenses	Excess of Selling Price above Cost of Production	Percentages of Excess of Selling Price above Cost of Production of Capital Invested	
0.22	0.34	0.65	-	-	-	41.08	71.72	1
0.45	0.19	1.96	0.26	0.56	0.41	13.10	12.33	2
0.21	0.26	0.53	*-	0.25	0.16	11.72	42.42	3
0.49	2.68	1.29	*-	0.18	-	13.69	16.10	4
2.85	0.01	2.04	5.38	1.00	-	37.61	14.14	5
0.85	0.18	0.45	-	0.18	-	19.57	28.49	6
0.67	0.36	1.25	-	7.92	0.05	6.41	7.43	7
0.13	0.05	1.02	-	0.43	-	7.40	14.91	8
0.59	0.76	0.65	0.94	0.85	-	14.31	14.56	9
0.31	0.16	2.12	1.37	0.37	-	30.88	47.61	10
0.24	0.24	1.05	-	0.76	-	31.27	25.08	11
0.22	0.28	1.54	*-	0.35	*-	10.39	24.62	12
0.56	0.28	1.50	-	0.22	0.40	32.48	43.78	13
0.68	0.24	0.72	-	4.00	0.05	23.71	34.35	14
0.60	0.59	2.91	0.06	1.36	0.03	16.33	19.98	15
0.88	0.42	0.80	0.05	0.51	0.07	19.67	15.96	16
0.55	0.29	1.41	0.04	0.51	0.04	18.89	20.15	17
0.32	0.25	0.15	-	-	-	37.93	95.31	18
0.38	0.33	0.63	*-	0.40	0.08	19.65	26.83	19
0.34	0.04	3.85	0.09	0.76	-	0.78	0.98	20
0.31	0.45	4.44	-	1.11	0.10	9.84	11.78	21
0.88	0.52	4.60	0.54	2.44	0.01	10.48	9.66	22
0.90	0.56	0.11	-	0.90	0.01	34.63	53.53	23
0.36	0.18	2.04	0.16	0.24	-	28.40	37.17	24
0.45	0.35	0.01	0.07	0.28	0.88	32.20	48.48	25
0.75	0.16	0.25	0.12	1.59	0.25	†-28.54	†-26.85	26
0.70	0.37	0.44	-	1.96	-	7.21	13.58	27
0.34	0.29	0.11	-	0.31	-	18.78	22.22	28
0.48	0.18	0.10	2.02	0.31	-	18.00	24.67	29
0.28	0.33	0.01	-	0.24	-	25.92	63.88	30
0.19	0.11	0.86	-	0.67	-	15.89	24.50	31
0.25	2.15	0.73	-	0.20	-	22.94	38.10	32
0.51	0.25	3.38	0.05	0.20	0.26	20.89	31.38	33
0.23	0.38	1.33	0.03	0.48	0.40	13.12	23.86	34
0.32	0.28	0.94	-	0.39	-	14.88	32.45	35
0.22	0.24	0.29	-	0.17	-	13.57	34.19	36
0.53	0.25	2.48	-	0.92	-	16.21	17.28	37
0.13	0.60	0.68	-	0.41	-	20.96	52.62	38
0.82	0.45	0.32	-	0.20	-	41.51	42.62	39
0.50	0.55	2.59	0.01	0.43	-	20.38	28.48	40
0.48	0.33	1.42	0.39	1.37	0.61	14.85	15.62	41
0.77	0.12	0.85	*-	3.03	-	12.98	12.17	42

\* Less than one one-hundredth of one per cent.

† Cost of production exceeds selling price.

We shall consider, as was done in the case of "Cost of Production," each item, in detail, that goes to form the "Selling Price," presenting in tabular form, where necessary, the classification of percentages of selling price as regards industries, and in other instances incorporating the information in text form. As regards each item of selling price, we shall give the names of the industries having the greatest and smallest proportions of expenditure for the item in question expressed in percentages of selling price.

### STOCK USED.

PERCENTAGES OF SELLING PRICE.		Number of Industries
10 but under 20 per cent, . . . . .		2
20 but under 30 per cent, . . . . .		9
30 but under 40 per cent, . . . . .		10
40 but under 50 per cent, . . . . .		13
50 but under 60 per cent, . . . . .		14
60 but under 70 per cent, . . . . .		10
70 but under 80 per cent, . . . . .		3
80 but under 90 per cent, . . . . .		2
100 per cent and over, . . . . .		1
WHOLE NUMBER OF INDUSTRIES, . . . . .		64

The industries with the greatest proportion are: Print Works, Dye Works, and Bleacheries, 104.35 per cent; Oils and Illuminating Fluids, 84.15 per cent; and Food Preparations (including Salt), 80.16 per cent. Print Works, Dye Works, and Bleacheries is the only industry in which the cost of production is greater than the selling price, and this condition of the industry is due to circumstances which are explained on pages 479-481, *ante*. As there shown, the seat of the difficulty is in the abnormal quantity of stock used. The industries with the smallest proportion of stock used as regards selling price are: Fancy Articles (including Fine Arts and Taxidermy), 20.15 per cent; Charcoal and Kindlers (including Fireworks and Matches), 19.07 per cent; and Models and Patterns, 15.08 per cent.

### SALARIES.

The industries in which the item of salaries forms the greatest proportion of selling price are: Electrical Apparatus

and Appliances, 7.85 per cent ; Printing, Publishing, and Book-binding, 6.82 per cent ; and Glass, 5.69 per cent. The smallest proportion is found in Building (including Concrete Walks, Paving, etc.), 0.34 per cent ; Trunks and Valises, 0.26 per cent ; and Shipbuilding (including Awnings, Tents, and Decorations), 0.10 per cent. Three industries do not report salaries paid, and in each of the remaining 61 industries the percentage of selling price paid in salaries is less than 10 per cent, the extremes being, as previously shown, 7.85 per cent (high) and 0.10 per cent (low).

### WAGES.

PERCENTAGES OF SELLING PRICE.	Number of Industries
Under 10 per cent, . . . . .	7
10 but under 20 per cent, . . . . .	18
20 but under 30 per cent, . . . . .	21
30 but under 40 per cent, . . . . .	15
40 but under 50 per cent, . . . . .	3
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

The industries in which the sum paid for wages forms the greatest proportion of selling price are : Stone, 46.31 per cent ; Arms and Ammunition, 43.84 per cent ; and Models and Patterns, 40.32 per cent. The industries with the smallest proportion are : Food Preparations (including Salt), 5.86 per cent ; Artificial Teeth and Dental Work, 5.25 per cent ; and Drugs and Medicines (including Perfumes, Toilet Articles, etc.), 3.82 per cent. The extremes are thus found to be 46.31 and 3.82 per cent.

### RENT.

The amount paid for rent, on the percentage basis, when compared with the selling price ranges from 16.67 to 0.03 per cent. In one industry no report for expenditure for rent was made, and in the case of 62 industries the proportion of selling price does not exceed 10 per cent. The industries with the highest proportion are : Artificial Teeth and Dental Work, 16.67 per cent ; Photographs and Photographic Materials, 9.48 per cent ; and Fancy Articles (including Fine Arts and

Taxidermy), 6.85 per cent. The lowest proportion is found in Cotton Goods, 0.07 per cent; Gas and Residual Products, 0.06 per cent; and Railroad Construction and Equipment, 0.03 per cent.

#### TAXES.

In no industry does the amount paid for taxes reach three per cent of the selling price. The industries with the highest proportion are: Gas and Residual Products, 2.85 per cent; Electrical Apparatus and Appliances, 1.97 per cent; Cotton Goods, 1.70 per cent. The lowest proportion is found in Boots and Shoes, 0.14 per cent; Hair Work (Animal and Human) and Trunks and Valises, each 0.13 per cent; and Charcoal and Kindlers (including Fireworks and Matches), 0.11 per cent.

#### INSURANCE.

For one industry the outlay for insurance is not given. In no one of the remaining 63 industries does the sum paid for insurance reach three per cent of the selling price. The industries showing the greatest proportion are: Furniture, 2.68 per cent; Sporting and Athletic Goods, 2.15 per cent; and Burial Cases, Caskets, Coffins, etc., 1.22 per cent. The smallest proportion is found in Hair Work (Animal and Human), 0.05 per cent; Oils and Illuminating Fluids, 0.04 per cent; and Gas and Residual Products, 0.01 per cent.

#### FREIGHT.

The amount paid for freight is 9.24 per cent of the selling price in one industry, but in no one of the remaining 63 industries does it reach five per cent. The industries showing the greatest proportional expenditure are: Chemical Preparations, Compounded (including Fertilizers), 9.24 per cent; Paper and Paper Goods, 4.60 per cent; and Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster), 4.57 per cent. The smallest proportional expenditures are found in Photographs and Photographic Materials and Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.), each 0.11 per cent; Scientific Instruments and Appliances, 0.10 per cent; Printing, Publishing, and Book-

binding and Shipbuilding (including Awnings, Tents, and Decorations), each 0.01 per cent.

#### NEW EQUIPMENT.

There were 30 industries that did not report any expenditure for new equipment during the year covered by the investigation. In the remaining 34 industries, Gas and Residual Products shows the largest percentage, or 5.38; Scientific Instruments and Appliances, 2.02 per cent; and Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), 1.46 per cent. Two industries show a percentage of 0.03, one industry a percentage of 0.02, four industries a percentage of 0.01, while in five industries the percentage is less than one one-hundredth of one per cent.

#### REPAIRS.

Two industries did not report any amount expended for repairs during the year covered by the investigation. In one industry the percentage was 7.92, but in no one of the remaining 61 industries does it exceed four per cent. The industries with the greatest proportion are: Glue, Isinglass, and Starch, 7.92 per cent; Liquors: Malt, Distilled, and Fermented, 4 per cent; and Worsted Goods, 3.03 per cent. The smallest proportion is found in Building (including Concrete Walks, Paving, etc.), 0.13 per cent; Clothing, 0.11 per cent; and Brooms, Brushes, and Mops, 0.02 per cent.

#### OTHER EXPENSES.

There were 38 industries that did not report an outlay for other expenses during the year covered by the investigation. In no one of the 26 remaining industries did the amount expended reach one per cent of selling price, the highest being Printing, Publishing, and Bookbinding with 0.88 per cent.

As was done under "Cost of Production," we present a combination table which shows, as regards each item forming part of the selling price, the number of industries properly falling within the lines of the customary classification of percentages.

PERCENTAGES OF SELLING PRICE.	NUMBER OF INDUSTRIES									
	Stock Used	Salaries	Wages	Rent	Taxes	Insurance	Freight	New Equipment	Repairs	Other Expenses
Under 10 per cent. . . . .	-	61	7	62	64	63	64	34	62	26
10 but under 20 per cent. . . . .	2	-	18	1	-	-	-	-	-	-
20 but under 30 per cent. . . . .	9	-	21	-	-	-	-	-	-	-
30 but under 40 per cent. . . . .	10	-	15	-	-	-	-	-	-	-
40 but under 50 per cent. . . . .	13	-	3	-	-	-	-	-	-	-
50 but under 60 per cent. . . . .	14	-	-	-	-	-	-	-	-	-
60 but under 70 per cent. . . . .	10	-	-	-	-	-	-	-	-	-
70 but under 80 per cent. . . . .	3	-	-	-	-	-	-	-	-	-
80 but under 90 per cent. . . . .	2	-	-	-	-	-	-	-	-	-
90 but under 100 per cent. . . . .	-	-	-	-	-	-	-	-	-	-
100 per cent and over. . . . .	*1	-	-	-	-	-	-	-	-	-
No percentage given. . . . .	-	3	-	1	-	1	-	30	2	38
WHOLE NUMBER OF INDUSTRIES. . . . .	64	64	64	64	64	64	64	64	64	64

\* Print Works, Dye Works, and Bleacheries, 104.35 per cent.

The details have been so fully considered, each under its particular title, that an analysis of the preceding table seems unnecessary.

We reproduce the following table from the "All Industries" presentation on page 399, *ante*:

RELATION OF COST OF PRODUCTION TO SELLING PRICE. ALL INDUSTRIES.  
[10,018 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	58.91
Salaries, . . . . .	1.73
Wages, . . . . .	22.34
Rent, . . . . .	0.73
Taxes, . . . . .	0.56
Insurance, . . . . .	0.33
Freight, . . . . .	1.27
New equipment, . . . . .	0.24
Repairs, . . . . .	0.61
Other expenses, . . . . .	0.13
Excess of Selling Price above Cost of Production, . . . . .	*12.95
TOTAL, . . . . .	100.00

\* Equivalent to 16.01 per cent on amount of capital invested.

This table enables us to supply an illustration similar to those given under "Capital Invested" and "Selling Price." We may assume that 100 per cent means \$100 worth of goods; that is, \$100 is the price at which a certain quantity of manufactured product is sold. From this assumption it follows that into \$100 worth (selling price) of manufactured product the Massachusetts manufacturer puts, on the average, \$58.91 worth of stock or materials; pays \$1.73 for salaries, \$22.34 for wages, 73 cents for rent, 56 cents for taxes, 33 cents for insurance, \$1.27 for freight, 24 cents for new equipment, 81 cents for repairs, and 13 cents for other expenses not previously enumerated. In each \$100 there is an excess of selling price above the cost of production amounting to \$12.95. *This \$12.95 is the manufacturer's gross profit, and is equivalent to 16.01 per cent on the amount of capital invested in and needed to carry on his business.*

The figures just given relate to the 64 industries as a whole, or what is termed "All Industries." The excess of selling price above the cost of production (or gross profit) in *each* of the 64 industries is shown in the following section:

#### EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION.

In one industry, Print Works, Dye Works, and Bleacheries, we have already learned that the cost of production exceeds the selling price, the reasons therefor being given on pages 479-481, *ante*. This industry is consequently omitted from the following arrangement of industries in accordance with a percentage classification:

CLASSIFICATION.	Number of Industries
Under 10 per cent, . . . . .	6
10 but under 20 per cent, . . . . .	31
20 but under 30 per cent, . . . . .	13
30 but under 40 per cent, . . . . .	9
40 but under 50 per cent, . . . . .	2
50 but under 60 per cent, . . . . .	1
60 but under 70 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .	63



We append a text-tabular presentation in which each industry considered is mentioned by name under its appropriate percentage classification.

*Under 10 per cent.*

Cotton Goods.	Paints, Colors, and Crude Chemicals
Glue, Isinglass, and Starch.	(including Dyestuffs).
Hair Work (Animal and Human).	Railroad Construction and Equip-
Oils and Illuminating Fluids.	ment.

*10 per cent but under 20 per cent.*

Arms and Ammunition.	Hosiery and Knit Goods.
Boots and Shoes.	Leather.
Boxes (Paper and Wooden).	Lumber.
Brick, Tiles, and Sewer Pipe.	Machines and Machinery.
Brooms, Brushes, and Mops.	Metals and Metallic Goods (includ-
Building (including Concrete Walks, ing Clocks and Watches).	
Paving, etc.).	Musical Instruments and Materials.
Burial Cases, Caskets, Coffins, etc.	Paper and Paper Goods.
Carpetings (including Cotton, Wool-	Rubber and Elastic Goods (including
len and Other Textiles, and Mixed Hose: Rubber, Linen, etc.).	
Textiles).	Scientific Instruments and Appli-
Chemical Preparations, Compounded ances.	
(including Fertilizers).	Silk and Silk Goods (including But-
Cordage and Twine.	tons and Dress Trimmings).
Electrical Apparatus and Appliances.	Straw and Palm Leaf Goods.
Flax, Hemp, and Jute Goods (includ-	Tallow, Candles, Soap, and Grease.
ing Linen).	Tobacco, Snuff, and Cigars.
Food Preparations (including Salt).	Toys and Games (Children's).
Furniture.	Woollen Goods.
Glass.	Worsted Goods.

*20 per cent but under 30 per cent.*

Agricultural Implements.	Polishes and Dressing (including
Artisans' Tools.	Emery and Sand Paper and Cloth,
Carriages and Wagons.	etc.).
Clothing.	Shipbuilding (including Awnings,
Cooking, Lighting, and Heating Ap- Tents, and Decorations).	
paratus.	Sporting and Athletic Goods.
Earthen, Plaster, and Stone Ware	Stone.
(including Cement, Kaolin, Lime, Trunks and Valises.	
and Plaster).	Wooden Goods (including Corks,
Liquors: Malt, Distilled, and Fer- Bungs, and Taps).	
mented.	

*30 per cent but under 40 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Ivory, Bone, Shell, and Horn Goods, etc.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Liquors and Beverages (Not Spirit- uous).
Gas and Residual Products.	Models and Patterns.
Ink, Mucilage, and Paste (includ- ing Crayons, Pencils, Crucibles, etc.).	Photographs and Photographic Ma- terials.
	Printing, Publishing, and Bookbind- ing.

*40 per cent but under 50 per cent.*

Fancy Articles (including Fine Arts and Taxidermy).	Whips, Lashes, and Stocks.
--	----------------------------

*50 per cent but under 60 per cent.*

Artificial Teeth and Dental Work.

*60 per cent but under 70 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).

An examination of the preceding presentation discloses the percentages of **gross profit** for the various industries considered. The industries having the greatest excess of selling price above cost of production, that is, having the greatest percentage of gross profit, are : Charcoal and Kindlers (including Fireworks and Matches), 60 per cent ; Artificial Teeth and Dental Work, 51.67 per cent ; and Whips, Lashes, and Stocks, 41.51 per cent. The industries with the smallest excess of selling price above cost of production, or gross profit, are : Glue, Isinglass, and Starch, 6.41 per cent ; Cotton Goods, 4.26 per cent ; and Oils and Illuminating Fluids, 0.78 per cent.

For the purpose of enabling the reader to make comparisons readily between percentages supplied previously, we present two tables which bring into juxtaposition certain salient results of the investigation. The first shows the percentages of stock used, wages, other items of selling price, and excess of selling price above cost of production, the figures in the first three columns being percentages of selling price.

INDUSTRIES.	PERCENTAGES OF SELLING PRICE REPRESENTED BY—			
	Stock Used	Wages	Other Items of Selling Price	Excess of Selling Price above Cost of Production
Agricultural implements, . . . . .	39.26	26.27	9.80	24.67
Arms and ammunition, . . . . .	31.07	43.84	7.28	17.81
Artificial teeth and dental work, . . . .	24.72	5.25	18.36	51.67
Artisans' tools, . . . . .	29.04	36.21	10.82	23.93
Boots and shoes, . . . . .	61.71	24.62	2.73	10.94
Boxes (paper and wooden), . . . . .	50.86	26.02	7.19	15.93
Brick, tiles, and sewer pipe, . . . . .	28.48	39.91	11.70	19.91
Brooms, brushes, and mops, . . . . .	55.08	23.38	4.93	16.61
Building (including concrete walks, paving, etc.), . . . . .	45.93	32.94	2.82	15.31
Burial cases, caskets, coffins, etc., . . .	52.91	24.28	8.90	13.91
Carpets (including cotton, woollen, and other textiles, and mixed textiles), . . .	62.87	20.79	5.21	11.13
Carriages and wagons, . . . . .	41.69	32.54	4.80	21.07
Charcoal and kindlers (including fire-works and matches), . . . . .	19.07	19.63	1.25	60.00
Chemical preparations, compounded (including fertilizers), . . . . .	61.88	9.14	13.53	15.45
Clothing, . . . . .	54.77	19.07	4.95	21.21
Cooking, lighting, and heating apparatus, .	30.89	36.84	7.54	24.73
Cordage and twine, . . . . .	66.46	13.14	7.22	10.18
Cotton goods, . . . . .	59.39	27.61	8.74	4.26
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	48.71	3.82	7.76	39.71
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), .	23.11	35.70	11.75	29.44
Electrical apparatus and appliances, . .	34.80	35.63	13.60	15.97
Electroplating (including jewelry burnishing and lapidary work), . . . . .	27.74	29.10	9.88	33.28
Fancy articles (including fine arts and taxidermy), . . . . .	20.15	28.85	9.92	41.08
Flax, hemp, and jute goods (including linen), . . . . .	62.47	19.05	5.38	13.10
Food preparations (including salt), . . .	80.16	5.86	2.26	11.72
Furniture, . . . . .	47.48	30.46	8.37	13.69
Gas and residual products, . . . . .	31.28	15.23	15.98	37.51
Glass, . . . . .	30.86	39.21	10.36	19.57
Glue, isinglass, and starch, . . . . .	66.68	15.74	11.17	6.41
Hair work (animal and human), . . . .	74.75	12.78	5.07	7.40
Hosiery and knit goods, . . . . .	55.01	24.65	6.03	14.31
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	40.60	22.08	6.44	30.88
Ivory, bone, shell, and horn goods, etc., .	46.41	17.21	5.11	31.27
Leather, . . . . .	70.75	15.30	3.56	10.39
Liquors and beverages (not spirituous), .	37.80	19.55	10.17	32.48
Liquors: malt, distilled, and fermented, .	53.13	9.50	8.66	28.71
Lumber, . . . . .	59.44	17.69	6.54	16.33
Machines and machinery, . . . . .	36.89	34.83	8.61	19.67
Metals and metallic goods (including clocks and watches), . . . . .	45.21	29.58	6.32	18.89

INDUSTRIES.	PERCENTAGES OF SELLING PRICE REPRESENTED BY—			
	Stock Used	Wages	Other Items of Selling Price	Excess of Selling Price above Cost of Production
Models and patterns, . . . . .	15.08	40.32	6.87	37.93
Musical instruments and materials, . .	41.31	32.06	6.98	19.65
Oils and illuminating fluids, . . . .	84.15	8.13	6.94	0.78
Paints, colors, and crude chemicals (in- cluding dyestuffs), . . . . .	67.92	10.75	11.49	9.84
Paper and paper goods, . . . . .	61.70	15.84	11.98	10.48
Photographs and photographic materials,	25.95	25.89	13.53	34.63
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . .	51.87	10.60	9.13	28.40
Printing, publishing, and bookbinding, .	26.38	29.99	11.43	32.20
Print works, dye works, and bleacheries,*	104.35	19.07	5.12	-28.54
Railroad construction and equipment, .	51.33	35.63	5.83	7.21
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	61.75	16.69	2.78	18.78
Scientific instruments and appliances, .	44.22	28.54	9.24	18.00
Shipbuilding (including awnings, tents, and decorations), . . . . .	42.27	28.56	3.25	25.92
Silk and silk goods (including buttons and dress trimmings), . . . . .	56.85	22.86	4.40	15.89
Sporting and athletic goods, . . . . .	45.44	24.31	7.31	22.94
Stone, . . . . .	25.66	46.31	7.14	20.39
Straw and palm leaf goods, . . . . .	56.79	23.64	6.45	13.12
Tallow, candles, soap, and grease, . .	72.70	9.02	3.40	14.88
Tobacco, snuff, and cigars, . . . . .	49.06	30.75	6.62	18.57
Toys and games (children's), . . . . .	36.43	37.76	9.60	16.21
Trunks and valises, . . . . .	51.66	21.78	5.60	20.96
Whips, lashes, and stocks, . . . . .	31.87	18.21	8.41	41.51
Wooden goods (including corks, bungs, and taps), . . . . .	41.36	30.10	8.16	20.38
Woollen goods, . . . . .	60.96	17.64	6.56	14.85
Worsted goods, . . . . .	56.86	24.33	5.88	12.93
ALL INDUSTRIES, . . . . .	58.91	22.34	5.80	12.95

\* In this industry the cost of production exceeded the selling price. See explanatory text on pages 479-481, ante.

The manner of reading this table is easy. In the industry known as Boots and Shoes, the manufacturers, on the average, for each \$100 worth of manufactured product sold, expend \$61.71 for stock or materials, \$24.62 for wages, and, after paying other expenses, \$2.73, have \$10.94 in the form of gross profit (or excess of selling price above cost of production) remaining. In Cotton Goods the respective amounts are: stock used \$59.39, wages \$27.61, other expenses \$8.74, and gross profit \$4.26. In Metals and Metallic Goods we find \$45.21 for stock, \$29.58 for wages, \$6.32 for other expenses,

and \$18.89 for gross profit. In Woollen Goods stock represents \$60.95, wages \$17.64, other expenses \$6.56, and gross profit \$14.85 in each \$100 worth of manufactured product.

The second table brings together the percentages showing the proportion of cost of production represented by wages and the proportion of selling price represented by wages. It follows in every case\* that the percentage of selling price is smaller than the percentage of cost of production because the selling price is always the larger number. The most marked variations between the two percentages occur in those industries in which the excess of selling price above cost of production (or gross profit) is very large.

INDUSTRIES.	PERCENTAGES	
	Wages of Cost of Production	Wages of Selling Price
Agricultural implements, . . . . .	34.88	26.27
Arms and ammunition, . . . . .	53.34	43.84
Artificial teeth and dental work, . . . . .	10.86	5.25
Artisans' tools, . . . . .	47.60	36.21
Boots and shoes, . . . . .	27.65	24.62
Boxes (paper and wooden), . . . . .	30.96	26.02
Brick, tiles, and sewer pipe, . . . . .	49.83	39.91
Brooms, brushes, and mops, . . . . .	28.03	23.38
Building (including concrete walks, paving, etc.), . . . . .	40.32	32.94
Burial cases, caskets, coffins, etc., . . . . .	28.20	24.28
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	23.39	20.79
Carriages and wagons, . . . . .	41.23	32.54
Charcoal and kindlers (including fireworks and matches), . . . . .	49.20	19.08
Chemical preparations, compounded (including fertilizers), . . . . .	10.81	9.14
Clothing, . . . . .	24.21	19.07
Cooking, lighting, and heating apparatus, . . . . .	48.94	36.84
Cordage and twine, . . . . .	14.63	13.14
Cotton goods, . . . . .	28.84	27.61
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	6.33	3.82
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	50.60	35.70
Electrical apparatus and appliances, . . . . .	42.39	35.63
Electroplating (including jewelry burnishing and lapidary work), . . . . .	48.62	29.10
Fancy articles (including fine arts and taxidermy), . . . . .	48.97	29.85
Flax, hemp, and jute goods (including linen), . . . . .	21.91	19.05
Food preparations (including salt), . . . . .	6.64	5.86
Furniture, . . . . .	35.30	30.46
Gas and residual products, . . . . .	24.38	15.23
Glass, . . . . .	48.75	39.21
Glue, isinglass, and starch, . . . . .	16.82	15.74
Hair work (animal and human), . . . . .	13.81	12.78

\* Excepting Print Works, Dye Works, and Bleacheries.

INDUSTRIES.	PERCENTAGES	
	Wages of Cost of Production	Wages of Selling Price
Hosiery and knit goods, . . . . .	28.77	24.65
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	31.95	22.08
Ivory, bone, shell, and horn goods, etc., . . . . .	25.04	17.21
Leather, . . . . .	17.07	15.30
Liquors and beverages (not spirituous), . . . . .	28.96	19.55
Liquors: malt, distilled, and fermented, . . . . .	13.33	9.50
Lumber, . . . . .	21.15	17.09
Machines and machinery, . . . . .	43.36	34.83
Metals and metallic goods (including clocks and watches), . . . . .	36.47	29.58
Models and patterns, . . . . .	64.96	40.32
Musical instruments and materials, . . . . .	39.89	32.06
Oils and illuminating fluids, . . . . .	8.19	8.13
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	11.92	10.75
Paper and paper goods, . . . . .	17.69	15.84
Photographs and photographic materials, . . . . .	39.61	25.89
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	14.80	10.60
Printing, publishing, and bookbinding, . . . . .	44.23	29.99
Print works, dye works, and bleacheries, . . . . .	14.84	*19.07
Railroad construction and equipment, . . . . .	38.40	35.63
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	20.55	16.69
Scientific instruments and appliances, . . . . .	34.81	28.54
Shipbuilding (including awnings, tents, and decorations), . . . . .	38.55	28.56
Silk and silk goods (including buttons and dress trimmings), . . . . .	27.18	22.86
Sporting and athletic goods, . . . . .	31.55	24.31
Stone, . . . . .	58.54	46.31
Straw and palm leaf goods, . . . . .	27.21	23.64
Tallow, candles, soap, and grease, . . . . .	10.59	9.02
Tobacco, snuff, and cigars, . . . . .	35.57	30.75
Toys and games (children's), . . . . .	45.07	37.76
Trunks and valises, . . . . .	27.55	21.78
Whips, lashes, and stocks, . . . . .	31.14	18.21
Wooden goods (including corks, bungs, and taps), . . . . .	37.80	30.10
Woollen goods, . . . . .	20.72	17.64
Worsted goods, . . . . .	27.95	24.33
ALL INDUSTRIES, . . . . .	25.66	22.34

\* Less than cost of production. See explanatory text on pages 479-481, *ante*.

We next consider the relation of excess of selling price above cost of production (or gross profit) to capital invested, first presenting a classification of percentages as regards industries. The first line in the following table means that in six industries the gross profits were less than 10 per cent of the capital invested; in 18 industries the gross profits formed 10 but under 20 per cent of the capital invested; the other lines should be read in a similar way.

PERCENTAGES OF GROSS PROFIT OF CAPITAL INVESTED.	Number of Industries
Under 10 per cent, . . . . .	6
10 but under 20 per cent, . . . . .	18
20 but under 30 per cent, . . . . .	12
30 but under 40 per cent, . . . . .	11
40 but under 50 per cent, . . . . .	6
50 but under 60 per cent, . . . . .	2
60 but under 70 per cent, . . . . .	2
70 but under 80 per cent, . . . . .	2
90 but under 100 per cent, . . . . .	2
100 but under 200 per cent, . . . . .	1
200 but under 300 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .	63

As the cost of production exceeded the selling price in Print Works, Dye Works, and Bleacheries, there was a loss instead of a gross profit, and consequently that industry is not included in the preceding table, nor in the text-tabular classification under percentage heads which follows :

*Under 10 per cent.*

Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Electrical Apparatus and Appliances. Glue, Isinglass, and Starch. Oils and Illuminating Fluids.
Cotton Goods.	Paper and Paper Goods.

*10 per cent but under 20 per cent.*

Agricultural Implements.	Hair Work (Animal and Human).
Arms and Ammunition.	Hosiery and Knit Goods.
Artisans' Tools.	Lumber.
Brick, Tiles, and Sewer Pipe.	Machines and Machinery.
Chemical Preparations, Compounded (including Fertilizers).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Cordage and Twine.	Railroad Construction and Equip- ment.
Flax, Hemp, and Jute Goods (in- cluding Linen).	Toys and Games (Children's).
Furniture.	Woollen Goods.
Gas and Residual Products.	Worsted Goods.

*20 per cent but under 30 per cent.*

Boxes (Paper and Wooden).	Ivory, Bone, Shell, and Horn Goods, etc.
Burial Cases, Caskets, Coffins, etc.	Leather.
Glass.	

*20 per cent but under 30 per cent — Concluded.*

Metals and Metallic Goods (including Clocks and Watches).	Scientific Instruments and Appliances.
Musical Instruments and Materials.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).	Straw and Palm Leaf Goods.
	Wooden Goods (including Corks, Bungs, and Taps).

*30 per cent but under 40 per cent.*

Boots and Shoes.	Liquors: Malt, Distilled, and Fermented.
Brooms, Brushes, and Mops.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Carriages and Wagons.	Sporting and Athletic Goods.
Cooking, Lighting, and Heating Apparatus.	Stone.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Tallow, Candles, Soap, and Grease.
	Tobacco, Snuff, and Cigars.

*40 per cent but under 50 per cent.*

Clothing.	Liquors and Beverages (Not Spirituous).
Food Preparations (including Salt).	Printing, Publishing, and Bookbinding.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Whips, Lashes, and Stocks.

*50 per cent but under 60 per cent.*

Photographs and Photographic Materials.	Trunks and Valises.
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*60 per cent but under 70 per cent.*

Building (including Concrete Walks, Paving, etc.).	Shipbuilding (including Awnings, Tents, and Decorations).
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*70 per cent but under 80 per cent.*

Electroplating (including Jewelry Burnishing and Lapidary Work).	Fancy Articles (including Fine Arts and Taxidermy).
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*90 per cent but under 100 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Models and Patterns.
--	----------------------

*100 per cent but under 200 per cent.*

Artificial Teeth and Dental Work.

*200 per cent but under 300 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).



The relations of the excess of selling price above cost of production (or gross profit) to capital invested are strongly brought out by the percentage table and text-tabular classification just preceding. Particular attention should be given, however, to the discussion of *percentage rates* of profit as related to the amount of capital and to the amount of profit *in dollars*, page 533, as the percentage rate considered by itself is not indicative of the amount of profit and may convey an exaggerated idea of the profit in certain industries. The industries in which the gross profit forms the highest proportion of capital invested are: Charcoal and Kindlers (including Fireworks and Matches), 213.67 per cent; Artificial Teeth and Dental Work, 117.36 per cent; and Models and Patterns, 95.31 per cent. The industries with the lowest proportion are: Electrical Apparatus and Appliances, 5.17 per cent; Cotton Goods, 2.25 per cent; and Oils and Illuminating Fluids, 0.98 per cent.

#### DISTRIBUTION OF EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION.

Of the 64 industries considered in this investigation, all but one, Print Works, Dye Works, and Bleacheries, show an excess of selling price above cost of production; that is, all the industries but one made a profit. We have called this profit a **gross profit**, because it seemed to us that a proper reduction for interest, for depreciation on value of machinery, implements, and tools, and an allowance for selling expenses and losses by bad debts should be made before the **Net Profit** could be determined. The reductions finally determined upon, after most careful consideration, were as follows:

Interest on cash and credit capital, . . . . .	5 per cent.
Depreciation on value of machinery, implements, and tools, .	10 per cent.
Allowance for selling expenses and losses by bad debts, . .	5 per cent.

In the case of *Interest*, the 5 per cent was figured upon the combined cash and credit capital, and the amount obtained was then converted into a percentage of selling price, so that it would be in shape to be deductible from the excess of selling price above cost of production, which was in the form of a percentage of selling price.

*Depreciation* was arrived at by taking 10 per cent of the combined value of machinery, implements, and tools, the amount obtained being also converted into an equivalent percentage of selling price, for reasons given in the preceding paragraph.

*Allowance for Selling Expenses and Losses by Bad Debts* was figured, primarily, upon selling price, 5 per cent on that amount being deemed adequate.

These three percentages of selling price being combined were subtracted from the percentage of selling price above cost of production, and the percentage of selling price remaining was called the **Net Profit**, this percentage of selling price being also converted into an equivalent percentage on amount of capital invested.

The result of these mathematical processes is as follows :

RECAPITULATION. DISTRIBUTION OF EXCESS OF SELLING PRICE ABOVE  
COST OF PRODUCTION. PERCENTAGES.

INDUSTRIES.	INTEREST (3 per cent on Cash and Credit Capital)	DEPRECIATION (10 per cent on Value of Machinery, Implements, and Tools)	ALLOWANCE (5 per cent on Selling Price for Selling Expenses and Losses by Bad Debts)	NET PROFITS	Percentage of Amount of Capital In- vested equivalent to the Percent- age of Selling Price called Net Profit
Agricultural implements, . . .	5.82	1.61	5.00	12.24	6.92
Arms and ammunition, . . .	1.80	5.63	5.00	5.38	3.36
Artificial teeth and dental work, .	0.50	3.07	5.00	43.10	97.90
Artisans' tools, . . . . .	3.67	5.12	5.00	10.14	6.05
Boots and shoes, . . . . .	1.12	0.47	5.00	4.35	14.06
Boxes (paper and wooden), . . .	1.52	1.28	5.00	8.13	12.85
Brick, tiles, and sewer pipe, . .	3.60	1.66	5.00	9.65	5.72
Brooms, brushes, and mops, . .	1.47	0.33	5.00	9.81	22.18
Building (including concrete walks, paving, etc.), . . . . .	0.91	0.42	5.00	11.98	40.54
Burial cases, caskets, coffins, etc., .	1.34	0.75	5.00	6.82	11.78
Carpetings (including cotton, wool- len, and other textiles, and mixed textiles), . . . . .	3.01	2.85	5.00	0.27	0.24
Carriages and wagons, . . . . .	1.92	0.74	5.00	13.41	19.67
Charcoal and kindlers (including fireworks and matches), . . .	0.61	0.93	5.00	53.46	190.38
Chemical preparations, compounded (including fertilizers), . . . .	3.88	1.01	5.00	5.56	5.52
Clothing, . . . . .	1.86	0.30	5.00	14.05	33.05
Cooking, lighting, and heating ap- paratus, . . . . .	2.61	1.02	5.00	16.10	20.24
Cordage and twine, . . . . .	2.32	1.99	5.00	0.87	1.04
Cotton goods, . . . . .	4.04	6.13	5.00	*-10.91	-5.77

\* See p. 305.

*Recapitulation. Distribution of Excess of Selling Price above Cost of Production. Percentages — Continued.*

INDUSTRIES.	INTEREST (5 per cent on Cash and Credit Capital)	DEPRECIATION (10 per cent on Value of Machinery, Implements, and Tools)	ALLOWANCE (5 per cent on Selling Price for Selling Expenses and Losses by Bad Debts)	NET PROFITS	Percentage of Amount of Capital In- vested equivalent to the Percent- age of Selling Price called Net Profit
Drugs and medicines (including per- fumes, toilet articles, etc.), . . .	1.66	0.57	5.00	32.48	74.65
Earthen, plaster, and stone ware (in- cluding cement, kaolin, lime, and plaster), . . . . .	2.05	1.02	5.00	21.37	25.89
Electrical apparatus and appliances,	6.24	13.63	5.00	*-8.90	-2.58
Electroplating (including jewelry burnishing and lapidary work), .	1.12	1.06	5.00	25.20	56.79
Fancy articles (including fine arts and taxidermy), . . . . .	2.19	1.14	5.00	32.75	57.18
Flax, hemp, and jute goods (includ- ing linen), . . . . .	2.86	2.10	5.00	3.14	2.96
Food preparations (including salt), .	0.72	0.36	5.00	5.84	20.40
Furniture, . . . . .	3.10	0.83	5.00	4.76	5.60
Gas and residual products, . . .	1.85	9.65	5.00	21.01	7.92
Glass, . . . . .	1.94	0.45	5.00	12.18	17.73
Glue, isinglass, and starch, . . .	2.68	0.93	5.00	†-2.20	-2.55
Hair work (animal and human), .	1.40	1.50	5.00	‡-0.50	-1.00
Hosiery and knit goods, . . . .	2.80	2.49	5.00	4.02	4.90
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), .	1.00	1.63	5.00	22.65	34.92
Ivory, bone, shell, and horn goods, etc.,	3.68	3.37	5.00	19.22	15.42
Leather, . . . . .	1.63	0.43	5.00	3.43	8.23
Liquors and beverages (not spirit- uous), . . . . .	1.77	2.41	5.00	23.30	31.39
Liquors: malt, distilled, and fer- mented, . . . . .	1.58	1.72	5.00	20.41	24.43
Lumber, . . . . .	1.78	1.78	5.00	7.77	9.30
Machines and machinery, . . . .	3.19	3.15	5.00	8.33	6.76
Metals and metallic goods (includ- ing clocks and watches), . . .	2.86	1.80	5.00	9.23	9.55
Models and patterns, . . . . .	0.89	2.00	5.00	30.04	75.48
Musical instruments and materials,	2.13	0.84	5.00	11.68	15.95
Oils and illuminating fluids, . . .	2.42	0.84	5.00	§-7.48	-9.34
Paints, colors, and crude chemicals (including dyestuffs), . . . .	2.54	1.34	5.00	0.96	1.15
Paper and paper goods, . . . . .	2.55	2.61	5.00	0.32	0.29
Photographs and photographic ma- terials, . . . . .	1.56	2.30	5.00	25.77	39.84
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	2.66	0.80	5.00	19.94	26.00
Printing, publishing, and bookbind- ing, . . . . .	1.44	3.11	5.00	22.65	34.06
Print works, dye works, and bleach- eries,   . . . . .	-2.64	-2.36	-5.00	** -38.54	-36.25

\* See p. 311. † See p. 329. || Excess of cost of production above selling price, 25.54 per cent.  
 ‡ See p. 327. § See p. 353. \*\* See pp. 365 and 479-481.

*Recapitulation. Distribution of Excess of Selling Price above Cost of Production. Percentages — Concluded.*

INDUSTRIES.	INTEREST (5 per cent on Cash and Credit Capital)	DEPRECIATION (10 per cent on Value of Machinery, Implements, and Tools)	ALLOWANCE (5 per cent on Selling Price for Selling Expenses and Losses by Bad Debts)	NET PROFITS	Percentage of Amount of Capital In- vested equivalent to the Percent- age of Selling Price called Net Profit
Railroad construction and equip- ment, . . . . .	0.79	1.07	5.00	0.35	0.66
Rubber and elastic goods (including hose: rubber, linen, etc.), . . .	2.87	1.45	5.00	9.46	11.20
Scientific instruments and appli- ances, . . . . .	2.40	1.64	5.00	8.96	12.29
Shipbuilding (including awnings, tents, and decorations), . . . .	1.18	0.67	5.00	19.07	47.00
Silk and silk goods (including but- tons and dress trimmings), . . .	2.09	1.14	5.00	7.66	11.81
Sporting and athletic goods, . . .	1.72	1.30	5.00	14.92	24.79
Stone, . . . . .	1.41	1.10	5.00	13.38	20.11
Straw and palm leaf goods, . . .	1.74	0.97	5.00	5.41	9.86
Tallow, candles, soap, and grease, .	1.29	0.50	5.00	8.09	17.64
Tobacco, snuff, and cigars, . . .	1.71	0.22	5.00	6.64	16.73
Toys and games (children's), . . .	2.79	1.65	5.00	6.77	7.21
Trunks and valises, . . . . .	1.74	0.31	5.00	13.91	34.93
Whips, lashes, and stocks, . . . .	3.65	1.61	5.00	31.25	32.01
Wooden goods (including corks, bungs, and taps), . . . . .	1.67	1.55	5.00	11.96	16.71
Woollen goods, . . . . .	2.65	2.00	5.00	5.20	5.47
Worsted goods, . . . . .	2.98	2.61	5.00	2.34	2.20

We ascertain from the table, after deductions were made for interest, depreciation, selling expenses, and bad debts, that *58 out of the 64 industries made a Net Profit.*

The industries in which the excess of selling price above the cost of production was not large enough to permit the subtraction of the previously specified percentages for interest, depreciation, selling expenses, and bad debts are indicated in the preceding table by the minus (—) sign.

We again state plainly, in order that it may not be misunderstood, that the deductions made from *gross profit* in order to arrive at *net profit* are based upon the computations of this Bureau. Respecting the proper allowance for interest, depreciation, and selling expenses, considerable variation of opinion exists. These charges are not uniform in the different industries, for many establishments do not incur direct outlay for interest inasmuch as they are not under the necessity of bor-

rowing capital. In other cases the reverse is true. To have included interest charges when the same were returned as part of the cost of production while making no allowance for interest in those cases where no actual payment for interest was made, and, therefore, none returned, would have been unfair, for this would have allowed interest on that portion of the capital which was borrowed while the capital which was not borrowed would have been relieved from interest charges. This would have disturbed the basis upon which net profits were computed in different establishments in the same industries and in one industry as compared with another. In the case of the establishment running on borrowed capital net profits would apparently be smaller than in an exactly similar establishment running on its own capital, and, therefore, having no outlay for interest. Yet in the latter case a portion of the apparent net profit might legitimately be considered as interest on capital. That is to say, a given amount of money divisible as profits would, in the first case, have been distributed part to the proprietors of the establishment and part to outside lenders of the capital, while, in the second case, all would have gone to the proprietors of the establishment and been termed profits although part of the profits would have been money in lieu of interest. To overcome this lack of uniformity a uniform rate of interest has been established for all the money capital involved equivalent to five per cent interest had this capital all been borrowed. From the aggregate interest charges so computed the sums returned by the different establishments as actually paid out for interest to outside parties were deducted so as to eliminate double interest charges on the capital. This procedure puts all the money capital, cash or credit, upon an equality as to interest. That is to say, the cash or credit capital, irrespective of persons, in each industry has been allowed five per cent interest before net profits are figured.

As to the charges for depreciation and selling expenses much the same statement may be made. The proper charge for depreciation varies with the different industries and is variously computed by different establishments. In the tabular presentation a uniform allowance has been made for this and also for selling expenses. It is obvious that allowances for depreciation and selling expenses are entirely proper as such items must

be provided for if the plant is kept intact for future production and in order to place the goods upon the market. If the charge for interest is considered improper, that is to say, if it is thought that interest should be merged in profits, such a disposition of the amount remaining in excess of the cost of production can, of course, be made; and if the rates allowed for interest, depreciation, and selling expenses are considered excessive in any industry or if they are thought inadequate, the material is furnished in the original tables, pages 270-399, *ante*, for such re-adjustment as any reader may desire to make. No interest allowance has been made on that portion of capital invested in land and buildings. Such capital, as shown by the table on page 398, represents 23.74 per cent of the aggregate capital invested in All Industries, this percentage varying in the different industries as has been pointed out. Where the buildings were hired, the land and building values are not included in capital but the expense incurred for rent appears as an element in the cost of production. The net profits in each industry, as given in the tables, therefore include an increment properly considered as rent in cases where the land and buildings are the property of the manufacturer. That is, the net profit is enlarged by the amount of rent saved in such cases; or, to put it differently, the net profit includes whatever income is properly due to the investment of capital in land and buildings, thereby saving cost of rent.

The figures for gross profit, it will be seen, are absolute. But in obtaining the proper percentage of net profit the element of hypothesis necessarily enters. We have clearly shown our method of procedure in obtaining the rate of net profit presented in the tables. We have endeavored to make such an allowance for interest, depreciation, selling expenses, and loss, as the most careful inquiry seemed to justify. But every detail is adequately presented in the tables to enable a different adjustment to be made, and we have explicitly placed before the reader our own methods so as to clearly separate the results which rest upon fact from those which rest upon hypothesis. We now proceed to analyze the details of the presentation relating to the distribution of the excess of selling price above the cost of production.

## INTEREST.

A classification of percentages as regards the 64 industries is appended.

PERCENTAGES OF SELLING PRICE.	Number of Industries
Under 1 per cent. . . . .	6
1 but under 2 per cent. . . . .	27
2 but under 3 per cent. . . . .	20
3 but under 4 per cent. . . . .	8
4 but under 5 per cent. . . . .	1
5 but under 6 per cent. . . . .	1
6 but under 7 per cent. . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

A text-tabular arrangement of the industries by name under their proper percentage heads is next given.

*Under 1 per cent.*

Artificial Teeth and Dental Work.	Food Preparations (including Salt).
Building (including Concrete Walks, Paving, etc.).	Models and Patterns.
Charcoal and Kindlers (including Fireworks and Matches).	Railroad Construction and Equip- ment.

*1 per cent but under 2 per cent.*

Arms and Ammunition.	Liquors: Malt, Distilled, and Fer- mented.
Boots and Shoes.	Lumber.
Boxes (Paper and Wooden).	Photographs and Photographic Ma- terials.
Brooms, Brushes, and Mops.	Printing, Publishing, and Bookbind- ing.
Burial Cases, Caskets, Coffins, etc.	Shipbuilding (including Awnings, Tents, and Decorations).
Carriages and Wagons.	Sporting and Athletic Goods.
Clothing.	Stone.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Straw and Palm Leaf Goods.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Tallow, Candles, Soap, and Grease.
Gas and Residual Products.	Tobacco, Snuff, and Cigars.
Glass.	Trunks and Valises.
Hair Work (Animal and Human).	Wooden Goods (including Corks, Bungs, and Taps).
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	
Leather.	
Liquors and Beverages (Not Spirit- uous).	

*2 per cent but under 3 per cent.*

Cooking, Lighting, and Heating Apparatus.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Cordage and Twine.	Paper and Paper Goods.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Fancy Articles (including Fine Arts and Taxidermy).	Print Works, Dye Works, and Bleacheries.
Flax, Hemp, and Jute Goods (including Linen).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Glue, Isinglass, and Starch.	Scientific Instruments and Appliances.
Hosiery and Knit Goods.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Metals and Metallic Goods (including Clocks and Watches).	Toys and Games (Children's).
Musical Instruments and Materials.	Woollen Goods.
Oils and Illuminating Fluids.	Worsted Goods.

*3 per cent but under 4 per cent.*

Artisans' Tools.	Furniture.
Brick, Tiles, and Sewer Pipe.	Ivory, Bone, Shell, and Horn Goods, etc.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Machines and Machinery.
Chemical Preparations, Compounded (including Fertilizers).	Whips, Lashes, and Stocks.

*4 per cent but under 5 per cent.*

Cotton Goods.

*5 per cent but under 6 per cent.*

Agricultural Implements.

*6 per cent but under 7 per cent.*

Electrical Apparatus and Appliances.

The industries in which the interest charge forms the greatest proportion of selling price are: Electrical Apparatus and Appliances, 6.24 per cent; Agricultural Implements, 5.82 per cent; and Cotton Goods, 4.04 per cent. The industries with the smallest proportion are: Food Preparations (including Salt); 0.72 per cent; Charcoal and Kindlers (including Fireworks and Matches), 0.61 per cent; and Artificial Teeth and Dental Work, 0.50 per cent.



### DEPRECIATION ON VALUE OF MACHINERY, IMPLEMENTS, AND TOOLS.

The arrangement of the industries in accordance with a percentage classification gives the following result :

PERCENTAGES OF SELLING PRICE.	Number of Industries
Under 1 per cent, . . . . .	21
1 but under 2 per cent, . . . . .	24
2 but under 3 per cent, . . . . .	10
3 but under 4 per cent, . . . . .	4
5 but under 6 per cent, . . . . .	2
6 but under 7 per cent, . . . . .	1
9 but under 10 per cent, . . . . .	1
10 but under 20 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64

An arrangement of the industries by name under percentage heads follows :

#### *Under 1 per cent.*

Boots and Shoes.	Glue, Isinglass, and Starch.
Brooms, Brushes, and Mops.	Leather.
Building (including Concrete Walks, Paving, etc.).	Musical Instruments and Materials.
Burial Cases, Caskets, Coffins, etc.	Oils and Illuminating Fluids.
Carriages and Wagons.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Charcoal and Kindlers (including Fireworks and Matches).	Shipbuilding (including Awnings, Tents, and Decorations).
Clothing.	Straw and Palm Leaf Goods.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Tallow, Candles, Soap, and Grease.
Food Preparations (including Salt).	Tobacco, Snuff, and Cigars.
Furniture.	Trunks and Valises.
Glass.	

#### *1 per cent but under 2 per cent.*

Agricultural Implements.	Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).
Boxes (Paper and Wooden).	Electroplating (including Jewelry Burnishing and Lapidary Work).
Brick, Tiles, and Sewer Pipe.	Fancy Articles (including Fine Arts and Taxidermy).
Chemical Preparations, Compounded (including Fertilizers).	Hair Work (Animal and Human).
Cooking, Lighting, and Heating Apparatus.	
Cordage and Twine.	

*1 per cent but under 2 per cent—Concluded.*

Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Liquors: Malt, Distilled, and Fermented.	Scientific Instruments and Appliances.
Lumber.	Silk and Silk Goods (including Buttons and Dress Trimmings).
Metals and Metallic Goods (including Clocks and Watches).	Sporting and Athletic Goods.
Paints, Colors, and Crude Chemicals (including Dyestuffs).	Stone.
Railroad Construction and Equipment.	Toys and Games (Children's).
	Whips, Lashes, and Stocks.
	Wooden Goods (including Corks, Bungs, and Taps).

*2 per cent but under 3 per cent.*

Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Models and Patterns.
Flax, Hemp, and Jute Goods (including Linen).	Paper and Paper Goods.
Hosiery and Knit Goods.	Photographs and Photographic Materials.
Liquors and Beverages (Not Spirituous).	Print Works, Dye Works, and Bleacheries.
	Woollen Goods.
	Worsted Goods.

*3 per cent but under 4 per cent.*

Artificial Teeth and Dental Work.	Machines and Machinery.
Ivory, Bone, Shell, and Horn Goods, etc.	Printing, Publishing, and Bookbinding.

*5 per cent but under 6 per cent.*

Arms and Ammunition.	Artisans' Tools.
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*6 per cent but under 7 per cent.*

Cotton Goods.

*9 per cent but under 10 per cent.*

Gas and Residual Products.

*10 per cent but under 20 per cent.*

Electrical Apparatus and Appliances.

In Electrical Apparatus and Appliances the reduction for depreciation on the value of machinery, implements, and tools, amounts to 13.63 per cent of the selling price; in Gas and Residual Products, 9.65 per cent; and in Cotton Goods, 6.13 per cent. These are the highest proportions. The lowest are: Trunks and Valises, 0.31 per cent; Clothing, 0.30 per cent; and Tobacco, Snuff, and Cigars, 0.22 per cent.

### ALLOWANCE FOR SELLING EXPENSES AND LOSSES BY BAD DEBTS.

The allowance for selling expenses and losses by bad debts being fixed, uniformly, at 5 per cent of the selling price, that figure was used for each industry.

### NET PROFIT.

Having subtracted from the excess of selling price above cost of production (or gross profit) the sum representing interest, depreciation, and allowance, we arrive at the **Net Profit** by industries. Of the 64 industries there are 58 that pay a net profit. They are given in the following table arranged to conform to a percentage classification :

PERCENTAGES OF SELLING PRICE.		Number of Industries
Under 1 per cent, . . . . .		5
2 but under 3 per cent, . . . . .		1
3 but under 4 per cent, . . . . .		2
4 but under 5 per cent, . . . . .		3
5 but under 6 per cent, . . . . .		5
6 but under 7 per cent, . . . . .		3
7 but under 8 per cent, . . . . .		2
8 but under 9 per cent, . . . . .		4
9 but under 10 per cent, . . . . .		4
10 but under 20 per cent, . . . . .		15
20 but under 30 per cent, . . . . .		8
30 but under 40 per cent, . . . . .		4
40 but under 50 per cent, . . . . .		1
50 but under 60 per cent, . . . . .		1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .		58

The 58 industries making a net profit are presented in the following text-tabular showing, they being arranged under their proper percentage heads. To avoid any possible misunderstanding, we again state that net profit is expressed in percentages of selling price.

#### *Under 1 per cent.*

Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Cordage and Twine.	Paper and Paper Goods.
	Railroad Construction and Equip- ment.

*2 per cent but under 3 per cent.*

Worsted Goods.

*3 per cent but under 4 per cent.*

Flax, Hemp, and Jute Goods (including Linen).      Leather.

*4 per cent but under 5 per cent.*Boots and Shoes.  
Furniture.

Hosiery and Knit Goods.

*5 per cent but under 6 per cent.*

Arms and Ammunition.

Food Preparations (including Salt).

Chemical Preparations, Compounded  
(including Fertilizers).

Straw and Palm Leaf Goods.

Woollen Goods.

*6 per cent but under 7 per cent.*

Burial Cases, Caskets, Coffins, etc.

Toys and Games (Children's).

Tobacco, Snuff, and Cigars.

*7 per cent but under 8 per cent.*

Lumber.

Silk and Silk Goods (including Buttons and Dress Trimmings).

*8 per cent but under 9 per cent.*

Boxes (Paper and Wooden).

Scientific Instruments and Appliances.

Machines and Machinery.

Tallow, Candles, Soap, and Grease.

*9 per cent but under 10 per cent.*

Brick, Tiles, and Sewer Pipe.

Metals and Metallic Goods (including Clocks and Watches).

Brooms, Brushes, and Mops.

Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).

*10 per cent but under 20 per cent.*

Agricultural Implements.

Musical Instruments and Materials.

Artisans' Tools.

Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).

Building (including Concrete Walks, Paving, etc.).

Shipbuilding (including Awnings, Tents, and Decorations).

Carriages and Wagons.

Sporting and Athletic Goods.

Clothing.

Stone.

Cooking, Lighting, and Heating Apparatus.

Trunks and Valises.

Glass.

Wooden Goods (including Corks, Bungs, and Taps).

Ivory, Bone, Shell, and Horn Goods, etc.

*20 per cent but under 30 per cent.*

Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Liquors and Beverages (Not Spirit- uous).
Electroplating (including Jewelry Burnishing and Lapidary Work).	Liquors: Malt, Distilled, and Fer- mented.
Gas and Residual Products.	Photographs and Photographic Ma- terials.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Printing, Publishing, and Bookbind- ing.

*30 per cent but under 40 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Models and Patterns.
Fancy Articles (including Fine Arts and Taxidermy).	Whips, Lashes, and Stocks.

*40 per cent but under 50 per cent.*

Artificial Teeth and Dental Work.

*50 per cent but under 60 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).

The industries showing the highest net profit are: Charcoal and Kindlers (including Fireworks and Matches), 53.46 per cent; Artificial Teeth and Dental Work, 43.10 per cent; and Fancy Articles (including Fine Arts and Taxidermy), 32.75 per cent. The industries paying the lowest net profit are: Railroad Construction and Equipment, 0.35 per cent; Paper and Paper Goods, 0.32 per cent; and Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), 0.27 per cent.

There are 6 industries in which a **Net Loss** is shown instead of a net profit. These industries are given below with the percentage of net loss of selling price.

Cotton Goods, . . . . .	10.91 per cent.
Electrical Apparatus and Appliances, . . . . .	8.90 per cent.
Glue, Isinglass, and Starch, . . . . .	2.20 per cent.
Hair Work (Animal and Human), . . . . .	0.50 per cent.
Oils and Illuminating Fluids, . . . . .	7.48 per cent.
Print Works, Dye Works, and Bleacheries, . . . . .	38.54 per cent.

The apparently great net loss in Print Works, Dye Works, and Bleacheries is explained by the remarks on pages 479-481, *ante*.

## PERCENTAGES OF NET PROFIT OF CAPITAL INVESTED.

The percentages already given for net profit are based upon the relation of net profit to selling price. In further elucidation of the subject, we present a classification by percentages for the 58 industries paying a net profit, based upon the relation of net profit to the amount of capital invested.\*

PERCENTAGES OF CAPITAL INVESTED.	Number of Industries
Under 1 per cent, . . . . .	3
1 but under 2 per cent, . . . . .	2
2 but under 3 per cent, . . . . .	2
3 but under 4 per cent, . . . . .	1
4 but under 5 per cent, . . . . .	1
5 but under 6 per cent, . . . . .	4
6 but under 7 per cent, . . . . .	3
7 but under 8 per cent, . . . . .	2
8 but under 9 per cent, . . . . .	1
9 but under 10 per cent, . . . . .	3
10 but under 20 per cent, . . . . .	13
20 but under 30 per cent, . . . . .	8
30 but under 40 per cent, . . . . .	7
40 but under 50 per cent, . . . . .	2
50 but under 60 per cent, . . . . .	2
70 but under 80 per cent, . . . . .	2
90 but under 100 per cent, . . . . .	1
Above 100 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .	58

We append a classification of industries by name under percentage heads.

*Under 1 per cent.*

Carpetings (including Cotton, Wool- len, and Other Textiles, and Mixed Textiles).	Paper and Paper Goods. Railroad Construction and Equip- ment.
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*1 per cent but under 2 per cent.*

Cordage and Twine.	Paints, Colors, and Crude Chemicals (including Dyestuffs).
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*2 per cent but under 3 per cent.*

Flax, Hemp, and Jute Goods (includ- ing Linen).	Worsted Goods.
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\* Note carefully the relation of the *percentage rates* of profit to the amount of capital and of profit in *dollars*, as discussed on page 533.

*3 per cent but under 4 per cent.*

Arms and Ammunition.

*4 per cent but under 5 per cent.*

Hosiery and Knit Goods.

*5 per cent but under 6 per cent.*

Brick, Tiles, and Sewer Pipe.

Furniture.

Chemical Preparations, Compounded  
(including Fertilizers).

Woollen Goods.

*6 per cent but under 7 per cent.*

Agricultural Implements.

Machines and Machinery.

Artisans' Tools.

*7 per cent but under 8 per cent.*

Gas and Residual Products.

Toys and Games (Children's).

*8 per cent but under 9 per cent.*

Leather.

*9 per cent but under 10 per cent.*

Lumber.

Straw and Palm Leaf Goods.

Metals and Metallic Goods (including  
Clocks and Watches).*10 per cent but under 20 per cent.*

Boots and Shoes.

Rubber and Elastic Goods (including  
Hose: Rubber, Linen, etc.).

Boxes (Paper and Wooden).

Scientific Instruments and Appli-  
ances.

Burial Cases, Caskets, Coffins, etc.

Carriages and Wagons.

Silk and Silk Goods (including But-  
tons and Dress Trimmings).

Glass.

Tallow, Candles, Soap, and Grease.

Ivory, Bone, Shell, and Horn Goods,  
etc.

Tobacco, Snuff, and Cigars.

Musical Instruments and Materi-  
als.Wooden Goods (including Corks,  
Bungs, and Taps).*20 per cent but under 30 per cent.*

Brooms, Brushes, and Mops.

Liquors: Malt, Distilled, and Fer-  
mented.Cooking, Lighting, and Heating Ap-  
paratus.Polishes and Dressing (including  
Emery and Sand Paper and Cloth,  
etc.).Earthen, Plaster, and Stone Ware  
(including Cement, Kaolin, Lime,  
and Plaster).Sporting and Athletic Goods.  
Stone.

Food Preparations (including Salt).

*30 per cent but under 40 per cent.*

Clothing.	Photographs and Photographic Materials.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Printing, Publishing, and Bookbinding.
Liquors and Beverages (Not Spirituous).	Trunks and Valises.
	Whips, Lashes, and Stocks.

*40 per cent but under 50 per cent.*

Building (including Concrete Walks, Paving, etc.).	Shipbuilding (including Awnings, Tents, and Decorations).
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*50 per cent but under 60 per cent.*

Electroplating (including Jewelry Burnishing and Lapidary Work).	Fancy Articles (including Fine Arts and Taxidermy).
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*70 per cent but under 80 per cent.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Models and Patterns.
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*90 per cent but under 100 per cent.*

Artificial Teeth and Dental Work.

*Above 100 per cent.*

Charcoal and Kindlers (including Fireworks and Matches).

The industries in which net profit forms the greatest proportion of capital invested are : Charcoal and Kindlers (including Fireworks and Matches), 190.38 per cent ; Artificial Teeth and Dental Work, 97.90 per cent ; and Models and Patterns, 75.48 per cent. The industries in which net profit forms the smallest proportion of capital invested are : Railroad Construction and Equipment, 0.66 per cent ; Paper and Paper Goods, 0.29 per cent ; and Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), 0.24 per cent.

In the 6 industries having a net loss, the percentages of the respective losses of capital invested are given below.

Cotton Goods, . . . . .	5.77 per cent.
Electrical Apparatus and Appliances, . . . . .	2.88 per cent.
Glue, Isinglass, and Starch, . . . . .	2.55 per cent.
Hair Work (Animal and Human), . . . . .	1.00 per cent.
Oils and Illuminating Fluids, . . . . .	9.34 per cent.
Print Works, Dye Works, and Bleacheries,* . . . . .	36.25 per cent.

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\* See explanatory remarks on pages 479-481, *ante*.



We bring forward for analysis the table for "All Industries" from page 399, *ante*, showing the distribution of excess of selling price above cost of production for the 10,013 establishments in the 64 industries.

DISTRIBUTION OF EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION.  
ALL INDUSTRIES. [10,013 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.15
Depreciation (10 per cent on value of machinery, implements, and tools), . .	1.90
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
Net profit, . . . . .	<b>*3.90</b>
TOTAL (percentage of selling price above cost of production), . . . .	12.95

\* Equivalent to 4.83 per cent on amount of capital invested.

We have seen, on page 507, preceding, that the Massachusetts manufacturer, on the average, has an excess of selling price above cost of production amounting to \$12.95 in each \$100 worth of manufactured product. The preceding table shows of this \$12.95 excess, that he requires, on the average, \$2.15 for interest, \$1.90 for depreciation on machinery, implements, and tools, and \$5.00 for selling expenses and to make up for losses by bad debts. *After these amounts are deducted he has remaining, as Net Profit \$3.90, which is equivalent to 4.83 per cent on the amount of capital invested, or an annual return of \$4.83 upon each \$100 of invested capital.* This is the result that we reach after three years of mathematical calculation in this office. No Part ever issued by this Bureau has called for more careful work, and none has ever been prepared in which every possible safeguard against statistical error has been more rigidly applied. It is possible, even now, that some minor errors may have escaped the scrutiny of our careful revision, but it is not believed that any mistake can have been made that would change a percentage materially in either the industry presentations or the aggregation for All Industries.

## COMPARISON OF EARNINGS AND PROFITS.

Before entering upon the detailed consideration of this vital part of the investigation, it needs to be stated again (see page 269) that "the *percentage rate* of net profits of capital invested should, in all cases, be compared with the net profit for each partner or stockholder as given in *amounts* in the table devoted to the comparison of earnings and profits."

For obvious reasons, in the preceding considerations of excess of selling price above cost of production (or gross profit), and of net profit, percentages instead of amounts have been used. Many of the percentages, at first glance, would seem to indicate, in certain industries, that the profit made was excessive. It will be found upon a close examination of these percentages that, in many cases, the large percentages of gross or net profit are associated with industries in which the personal or technical skill of the manufacturer plays an important part; in other cases, the amounts involved, as regards both capital invested and value of goods made and work done, are small. In industries of the first class, skill rather than money is the essential capital. Profits, in these industries, may be large as related to the money capital but not excessive when considered as a reward for special skill. In such cases that which appears as profit is in fact largely a wage for the special skill of the employer which, in these industries, is not, as in most cases, entirely confined to administering the business or superintending the labor of others. The employer, however, draws no specified wage but takes net profits, whether large or small, in lieu of wage. An instance in point is that of Models and Patterns in which the net profit is 30.04 per cent of selling price or 75.48 per cent on the money capital invested. If, however, we turn to the tables on pages 348 and 349 we shall find not only that the amount of money required to carry on this industry was comparatively small, but we shall also find that the average amount received by each partner for the year was but \$1,321. If only the fact were stated that a profit upon capital of 75.48 per cent was made, the usual assumption would be that this was extraordinarily large, and that the profit in this industry was, therefore, excessive. But this impression vanishes when it appears that

the capital and skill involved brought to each partner an average income of but \$1,321. The fallacy of assuming that profits are either excessive or insufficient by simply considering the percentage rate of such profits upon the amount of money capital involved is clearly shown by this illustration.

We have shown, by percentages, the relations of net profit to selling price (or value of goods made and work done) and also to capital invested. In the following table we have placed opposite the percentages of selling price represented by net profit the number of industries coming under each percentage and also the selling price, or value of goods made and work done, comprehended by those percentages, together with a column which shows the percentage of selling price under each percentage of total selling price :

RELATION OF NET PROFIT TO SELLING PRICE.

PERCENTAGES OF SELLING PRICE.	Number of Industries	Value of Goods Made and Work Done (Selling Price)	Percentages of Total Selling Price
Under 1 per cent, . . . . .	5	\$31,626,105	7.97
2 but under 3 per cent, . . . . .	1	8,238,552	2.09
3 but under 4 per cent, . . . . .	2	23,479,936	5.92
4 but under 5 per cent, . . . . .	3	98,905,263	24.93
5 but under 6 per cent, . . . . .	5	83,112,952	20.95
6 but under 7 per cent, . . . . .	3	2,684,872	0.68
7 but under 8 per cent, . . . . .	2	4,806,559	1.16
8 but under 9 per cent, . . . . .	4	20,730,128	5.22
9 but under 10 per cent, . . . . .	4	41,987,563	10.58
10 but under 20 per cent, . . . . .	15	58,237,034	14.68
20 but under 30 per cent, . . . . .	8	20,401,415	5.14
30 but under 40 per cent, . . . . .	4	2,476,340	0.62
40 but under 50 per cent, . . . . .	1	172,587	0.04
50 but under 60 per cent, . . . . .	1	68,912	0.02
TOTALS, . . . . .	58	\$396,777,218	100.00

The above table means, considering the first line or "under one per cent," that in 5 industries which turned out an annual product valued at \$31,626,105, or 7.97 per cent of the total value of product (\$396,777,218) in the 58 industries considered, the net profit formed under one per cent of the selling price of the goods made. Taking the other extreme we find one industry with an annual product of \$68,912, or 0.02 per cent of the total value of product of all the industries considered, in which the net profit was between 50 and 60 per cent

of the selling price. Of the grand product of \$396,777,218 the net profit on 40.91 per cent, or \$162,299,856, was less than 5 per cent of selling price, representing 11 industries; on 38.59 per cent, or \$153,121,074, it was 5 but under 10 per cent, comprehending 18 industries; on 14.68 per cent, or \$58,237,034, the net profit reached 10 but under 20 per cent of selling price, as shown by 15 industries; while on 5.82 per cent, or \$23,119,254, it was in excess of 20 per cent of selling price, being the product of 14 industries. We present a similar table based upon the percentages of net profit of capital invested.

RELATION OF NET PROFIT TO CAPITAL INVESTED.

PERCENTAGES OF CAPITAL INVESTED.	Number of Industries	Amount of Capital Invested	Percentages of Total Capital Invested
Under 1 per cent, . . . . .	3	\$28,050,938	10.87
1 but under 2 per cent, . . . . .	2	4,728,456	1.83
2 but under 3 per cent, . . . . .	2	11,132,094	4.31
3 but under 4 per cent, . . . . .	1	2,256,815	0.87
4 but under 5 per cent, . . . . .	1	3,945,926	1.53
5 but under 6 per cent, . . . . .	4	37,690,935	14.60
6 but under 7 per cent, . . . . .	3	23,060,062	9.17
7 but under 8 per cent, . . . . .	2	8,286,679	3.21
8 but under 9 per cent, . . . . .	1	8,981,009	3.48
9 but under 10 per cent, . . . . .	3	32,536,174	12.61
10 but under 20 per cent, . . . . .	13	51,979,786	20.14
20 but under 30 per cent, . . . . .	8	23,796,681	9.22
30 but under 40 per cent, . . . . .	7	14,883,934	5.75
40 but under 50 per cent, . . . . .	2	5,183,306	2.01
50 but under 60 per cent, . . . . .	2	143,855	0.06
70 but under 80 per cent, . . . . .	2	779,934	0.30
90 but under 100 per cent, . . . . .	1	75,968	0.03
Above 100 per cent, . . . . .	1	19,350	0.01
TOTALS, . . . . .	58	\$258,081,922	100.00

This table may be analyzed in a similar way to that which precedes, relating to selling price. In 3 industries with \$28,050,938 capital, or 10.87 per cent of the total capital invested in the 58 industries considered, or \$258,081,922, the net profit was less than one per cent of the capital invested. In one industry, having \$19,350 invested capital, or 0.01 per cent of total capital considered, the net profit was more than equal to the capital invested; that is, the net profit exceeded 100 per cent.

Of the grand capital invested of \$258,081,922, the net profit on 19.41 per cent, or \$50,114,229, was less than 5 per cent, representing 9 industries; on 43.07 per cent, or \$111,154,859, it was 5 but under 10 per cent, comprehending 13 industries; on 20.14 per cent, or \$51,979,786, the net profit reached 10 but under 20 per cent of the capital invested, as shown by 13 industries; while on 17.38 per cent, or \$44,833,048, the net profit was in excess of 20 per cent of capital invested, being the capital invested in 23 industries.

The percentages of net profit of selling price and of capital invested, in their condensed form, are repeated below in order to allow of direct comparison.

CLASSIFICATION OF PERCENTAGES OF NET PROFIT.	Percentages of Total Selling Price Paying Specified Percentages of Net Profit	Percentages of Total Capital Invested Paying Specified Percentages of Net Profit
Under 5 per cent, . . . . .	40.91	19.41
5 but under 10 per cent, . . . . .	38.59	43.07
10 but under 20 per cent, . . . . .	14.68	20.14
20 per cent and over, . . . . .	5.82	17.38
TOTALS, . . . . .	100.00	100.00

#### RELATION OF NET PROFIT TO COST OF PRODUCTION.

We have shown the relations of net profit to selling price and capital invested and it remains to present its relation to cost of production. As we have previously explained, it is on the cost of production that the manufacturer, as a rule, figures his profit because that is a fixed figure, while selling price and capital invested vary under competition or according to the financial needs of his business.

INDUSTRIES.	Cost of Production	Net Profits	Percentage of Net Profits of Cost of Production
Agricultural implements, . . . . .	\$684,972	\$143,804	16.25
Arms and ammunition, . . . . .	1,157,917	75,843	6.55
Artificial teeth and dental work, . . . . .	83,408	74,396	89.20
Artisans' tools, . . . . .	1,542,094	205,604	13.33
Boots and shoes, . . . . .	76,499,809	3,735,755	4.88
Boxes (paper and wooden), . . . . .	2,420,558	234,164	9.67
Brick, tiles, and sewer pipe, . . . . .	427,622	51,518	12.05
Brooms, brushes, and mops, . . . . .	878,917	108,380	11.76
Building (including concrete walks, paving, etc.), . . . . .	13,818,340	1,963,465	14.67

INDUSTRIES.	Cost of Production	Net Profits	Percentage of Net Profits of Cost of Production
Burial cases, caskets, coffins, etc., . . . . .	\$406,442	\$32,166	7.91
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	6,688,539	20,574	0.31
Carriages and wagons, . . . . .	3,968,263	674,017	16.99
Charcoal and kindlers (including fireworks and matches), . . . . .	27,567	36,338	133.63
Chemical preparations, compounded (including fertilizers), . . . . .	3,054,589	200,833	6.57
Clothing, . . . . .	12,209,485	2,178,470	17.84
Cooking, lighting, and heating apparatus, . . . . .	1,440,062	307,902	21.38
Cordage and twine, . . . . .	4,046,471	39,312	0.97
Cotton goods, . . . . .	51,617,956	*—5,879,450	*—11.39
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	983,641	529,938	53.88
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	348,035	105,416	30.29
Electrical apparatus and appliances, . . . . .	525,042	*—55,594	*—10.59
Electroplating (including jewelry burnishing and lapidary work), . . . . .	149,764	56,557	37.76
Fancy articles (including fine arts and taxidermy), . . . . .	45,520	25,309	55.60
Flax, hemp, and jute goods (including linen), . . . . .	1,904,519	68,923	3.62
Food preparations (including salt), . . . . .	41,935,419	2,678,551	6.39
Furniture, . . . . .	7,761,522	428,298	5.52
Gas and residual products, . . . . .	1,883,649	633,140	33.61
Glass, . . . . .	454,890	68,878	15.14
Glue, isinglass, and starch, . . . . .	878,049	*—20,637	*—2.35
Hair work (animal and human), . . . . .	326,451	*—1,757	*—0.54
Hosiery and knit goods, . . . . .	3,439,007	161,388	4.69
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	75,890	24,874	32.78
Ivory, bone, shell, and horn goods, etc., . . . . .	967,805	270,664	27.97
Leather, . . . . .	19,077,167	729,863	3.83
Liquors and beverages (not spirituous), . . . . .	166,006	57,200	34.46
Liquors: malt, distilled, and fermented, . . . . .	3,741,754	1,071,580	28.64
Lumber, . . . . .	1,599,544	148,545	9.29
Machines and machinery, . . . . .	11,847,998	1,229,182	10.37
Metals and metallic goods (including clocks and watches), . . . . .	25,011,366	2,848,304	11.39
Models and patterns, . . . . .	109,172	52,843	48.40
Musical instruments and materials, . . . . .	3,576,729	519,712	14.53
Oils and illuminating fluids, . . . . .	1,363,764	*—103,068	*—7.58
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	1,036,456	11,011	1.06
Paper and paper goods, . . . . .	15,444,746	55,193	0.36
Photographs and photographic materials, . . . . .	366,647	144,549	39.42
Pollashes and dressing (including emery and sand paper and cloth, etc.), . . . . .	999,952	278,407	27.84
Printing, publishing, and bookbinding, . . . . .	7,122,104	2,378,860	33.40
Print works, dye works, and bleacheries, . . . . .	16,647,080	*—4,989,927	*—29.97
Railroad construction and equipment, . . . . .	1,105,949	4,201	0.38
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	7,766,895	905,213	11.65

\* Net loss.

INDUSTRIES.	Cost of Production	Net Profits	Percentage of Net Profits of Cost of Production
Scientific instruments and appliances, . . . . .	\$678,619	\$74,189	10.93
Shipbuilding (including awnings, tents, and decorations), . . . . .	665,182	171,257	25.75
Silk and silk goods (including buttons and dress trimmings), . . . . .	2,265,690	206,334	9.11
Sporting and athletic goods, . . . . .	136,151	26,370	19.37
Stone, . . . . .	3,224,784	545,550	16.92
Straw and palm leaf goods, . . . . .	3,359,698	203,133	6.23
Tallow, candles, soap, and grease, . . . . .	1,935,298	183,843	9.50
Tobacco, snuff, and cigars, . . . . .	1,643,401	126,237	7.68
Toys and games (children's), . . . . .	260,923	21,076	8.08
Trunks and valises, . . . . .	127,292	22,408	17.60
Whips, lashes, and stocks, . . . . .	346,044	184,894	53.43
Wooden goods (including corks, bungs, and taps), . . . . .	2,516,504	378,038	15.02
Woollen goods, . . . . .	22,849,959	1,395,979	6.11
Worsted goods, . . . . .	7,217,243	193,859	2.69
ALL INDUSTRIES, . . . . .	\$406,462,131	\$18,237,384	4.49

We find on goods involving an aggregate cost of \$406,462,-131 that a net profit of \$18,237,384 was made, amounting to 4.49 per cent of the cost of production. An arrangement of industries in accordance with a classification of percentages of net profit of cost of production is appended.

PERCENTAGES OF NET PROFIT OF COST OF PRODUCTION.	Number of Industries
Under 10 per cent, . . . . .	23
10 but under 20 per cent, . . . . .	17
20 but under 30 per cent, . . . . .	5
30 but under 40 per cent, . . . . .	7
40 but under 50 per cent, . . . . .	1
50 but under 60 per cent, . . . . .	3
60 but under 90 per cent, . . . . .	1
Above 100 per cent, . . . . .	1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .	58

The following industries show the highest percentages of net profit of cost of production: Charcoal and Kindlers (including Fireworks and Matches), 133.63 per cent; Artificial Teeth and Dental Work, 89.20 per cent; and Fancy Articles (including Fine Arts and Taxidermy), 55.60 per cent. The industries having the lowest percentages of net profit of cost of

production are: Railroad Construction and Equipment, 0.38 per cent; Paper and Paper Goods, 0.36 per cent; and Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), 0.31 per cent.

In the 6 industries having a net loss the cost of production was \$71,358,342 and the net loss \$11,050,433, or 15.49 per cent of the cost of production.

If we take the classified percentages of net profit of cost of production, as shown in the left hand column of the subjoined table, and put opposite to each line of the classification the proper cost of production and net profit, we are able to secure the average percentages of net profit of cost of production as shown in the right hand column of the table.

CLASSIFICATION OF PERCENTAGES.	Cost of Production	Net Profits	Average Percentage of Net Profits of Cost of Production
Under 10 per cent, . . . . .	\$227,010,666	\$10,955,081	4.83
10 but under 20 per cent, . . . . .	88,570,921	11,928,052	13.47
20 but under 30 per cent, . . . . .	7,814,755	2,099,810	26.87
30 but under 40 per cent, . . . . .	10,112,095	3,400,666	33.63
40 but under 50 per cent, . . . . .	109,172	52,543	48.40
50 but under 60 per cent, . . . . .	1,375,205	740,141	53.82
60 but under 90 per cent, . . . . .	83,408	74,396	89.20
Above 100 per cent, . . . . .	27,567	36,838	133.63
TOTALS, . . . . .	\$335,103,789	\$29,287,817	8.74

From this table the 6 industries showing a net loss are omitted, and, consequently, the aggregates vary from the table preceding in which the industries that made a loss were included; if from the net profits as given above, or \$29,287,817, the net loss in the 6 industries previously referred to is subtracted, this net loss amounting to \$11,050,433, we have \$18,237,384 remaining as the *actual net profits* in all industries.

It will be noticed that \$227,010,666 out of \$335,103,789 (cost of production) paid \$10,955,081 in profits, being an average percentage of 4.83 of the cost of production; and that \$88,570,921 (cost of production) paid \$11,928,052 in profits, or an average percentage of 13.47 of the cost of production. There remain but \$19,522,202 (cost of production) on which \$6,404,684 were made in profits, the average percentage of cost of production being 32.81.



### "NO PROFITS."

On page 398, *ante*, under the heading "Capital Invested" we find the fact stated that out of 10,013 establishments reporting as regards profits, there were 762, or 3.25 per cent, that answered to the effect that they did not make a profit. We present in the following table the number of establishments reporting that they did not make a profit, the amount of capital invested in these establishments, the value of goods made and work done by them, and in the right hand column we show the proportional value of product (goods made or work done) to each dollar of invested capital; that is for each dollar invested how many dollars' worth of product value were secured:

### "NO PROFITS."

INDUSTRIES.	Number of Establishments	Amount of Capital Invested	Value of Goods Made and Work Done	Proportional Value of Product to One Dollar of Capital Invested
Agricultural implements, . . . . .	3	\$468,515	\$135,526	\$0.28
Arms and ammunition, . . . . .	3	265,432	113,269	0.43
Artificial teeth and dental work, . . . .	17	9,543	11,884	1.24
Artisans' tools, . . . . .	8	293,289	107,494	0.37
Boots and shoes, . . . . .	63	1,650,368	4,399,796	2.66
Boxes (paper and wooden), . . . . .	9	61,965	107,813	1.74
Brick, tiles, and sewer pipe, . . . . .	4	70,587	37,350	0.53
Brooms, brushes, and mops, . . . . .	6	29,825	34,668	1.16
Building (including concrete walks, paving, etc.), . . . . .	37	310,825	543,688	1.75
Burial cases, caskets, coffins, etc., . . .	2	16,500	6,500	0.39
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	5	273,500	450,400	1.65
Carriages and wagons, . . . . .	11	124,000	119,658	0.96
Charcoal and kindlers (including fireworks and matches),* . . . . .	-	-	-	-
Chemical preparations, compounded (including fertilizers), . . . . .	6	76,920	176,759	2.30
Clothing, . . . . .	34	808,253	960,504	1.19
Cooking, lighting, and heating apparatus, . . .	3	42,000	55,350	1.32
Cordage and twine, . . . . .	3	15,300	13,733	0.90
Cotton goods, . . . . .	50	38,822,437	17,455,904	0.47
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	35	11,500	29,171	2.54
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . .	2	21,200	5,374	0.25
Electrical apparatus and appliances, . . .	3	414,909	66,782	0.16
Electroplating (including jewelry burnishing and lapidary work), . . . . .	3	13,350	12,600	0.94
Fancy articles (including fine arts and taxidermy), . . . . .	1	750	4,000	5.33
Flax, hemp, and jute goods (including linen), . . .	2	1,100,000	730,989	0.66

\* All the establishments reporting made a profit.

## "No Profits"—Concluded.

INDUSTRIES.	Number of Establishments	Amount of Capital Invested	Value of Goods Made and Work Done	Proportional Value of Product to One Dollar of Capital Invested
Food preparations (including salt), . . . . .	42	\$369,422	\$1,801,616	\$2.07
Furniture, . . . . .	35	1,239,697	1,304,751	1.05
Gas and residual products, . . . . .	3	184,700	22,891	0.12
Glass,* . . . . .	-	-	-	-
Glue, isinglass, and starch, . . . . .	2	164,500	177,940	1.08
Hair work (animal and human), . . . . .	1	25	24	0.96
Hosiery and knit goods, . . . . .	2	203,160	132,572	0.65
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.),* . . . . .	-	-	-	-
Ivory, bone, shell, and horn goods, etc., . . . . .	1	8,700	54,900	6.31
Leather, . . . . .	27	1,629,507	2,883,864	1.77
Liquors and beverages (not spirituous), . . . . .	1	2,000	5,000	2.50
Liquors: malt, distilled, and fermented, . . . . .	6	42,315	32,994	0.78
Lumber, . . . . .	27	205,309	151,966	0.74
Machines and machinery, . . . . .	85	4,073,439	1,376,185	0.34
Metals and metallic goods (including clocks and watches), . . . . .	92	2,728,359	1,893,559	0.69
Models and patterns, . . . . .	1	400	4,000	10.00
Musical instruments and materials, . . . . .	2	126,800	239,000	1.88
Oils and illuminating fluids, . . . . .	3	723,598	810,542	1.12
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	2	142,306	133,156	0.94
Paper and paper goods, . . . . .	20	2,735,909	2,836,862	0.85
Photographs and photographic materials, . . . . .	6	10,125	14,198	1.40
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	5	73,990	69,602	0.94
Printing, publishing, and bookbinding, . . . . .	23	515,770	573,582	1.11
Print works, dye works, and bleacheries, . . . . .	10	6,563,521	6,281,900	0.96
Railroad construction and equipment, . . . . .	4	111,976	261,231	2.33
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	3	306,150	552,328	1.80
Scientific instruments and appliances, . . . . .	2	44,600	2,750	0.06
Shipbuilding (including awnings, tents, and decorations), . . . . .	8	22,950	33,941	1.48
Silk and silk goods (including buttons and dress trimmings), . . . . .	2	143,590	343,431	2.39
Sporting and athletic goods, . . . . .	1	3,100	6,000	1.94
Stone, . . . . .	9	212,516	244,723	1.15
Straw and palm leaf goods, . . . . .	3	491,425	450,178	0.92
Tallow, candles, soap, and grease, . . . . .	9	26,772	22,544	0.84
Tobacco, snuff, and cigars, . . . . .	13	90,975	231,206	2.54
Toys and games (children's), . . . . .	1	26,000	35,000	1.35
Trunks and valises, . . . . .	1	2,000	8,530	4.27
Whips, lashes, and stocks, . . . . .	1	2,000	100	0.05
Wooden goods (including corks, bungs, and taps), . . . . .	20	230,065	168,073	0.73
Woollen goods, . . . . .	25	2,824,759	2,664,948	0.94
Worsted goods, . . . . .	4	1,236,476	1,521,570	1.23
ALL INDUSTRIES, . . . . .	762	\$70,919,878	\$52,416,619	\$0.74

\* All the establishments reporting made a profit.

It is shown previously that the 762 establishments which reported not making a profit had \$70,919,878 invested in manufacturing and turned out an annual product worth \$52,416,619. This means \$0.74 of product value to each dollar of capital invested. The 9,251 establishments that reported making a profit had capital invested to the amount of \$306,791,926 and made goods worth \$414,516,434, or a product value of \$1.35 to each dollar of capital invested, or very nearly twice the product value in those establishments that report "no profits."

Of course the condition of "no profits" cannot be permanently continued in any given establishment. The reasons for no profit being made in the case of the 762 establishments are undoubtedly various. In some instances the concerns had probably just begun business and had not yet reached the profit making stage. In others, financial difficulties had been encountered which, if continued, would lead to the abandonment of business. In others still, the year selected for the investigation happened to be a poor one for the concern and the loss in it would be made up in a subsequent year. It is probably true, however, that returns for ten thousand establishments taken at random in almost any year would show a like proportion of establishments making no profit.

It does not by any means follow that an establishment turning out an annual product value of \$1.35 for each dollar of capital invested will make a profit. A reference to the "No Profits" table will effectually disprove this, for we find a product value of \$2.66 to each dollar of invested capital in the case of \$4,389,796 worth of boots and shoes and yet the 63 establishments turning out these goods did not make a profit. So also in the case of Chemical Preparations, Compounded (including Fertilizers), with \$2.30 product value to each dollar of capital invested, and many other industries as shown in the "No Profits" presentation. In order to show the variations in product value to each dollar of invested capital, for establishments not making a profit, we have prepared the following classified summary :

CLASSIFICATION OF PRODUCT VALUES.	Number of Industries
Under 50 cents, . . . . .	11
50 cents but under \$1, . . . . .	18
\$1 but under \$2, . . . . .	20
\$2 but under \$3, . . . . .	8
\$4 but under \$5, . . . . .	1
\$5 but under \$10, . . . . .	2
\$10, . . . . .	1
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . . . .	61

There are 3 industries, — Charcoal and Kindlers (including Fireworks and Matches), Glass, and Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.) in which all of the establishments reporting made a profit.

#### RELATION OF EXPENSES TO CAPITAL INVESTED.

By "Expenses" in this consideration is meant the charges for interest, depreciation, selling expenses, and allowance for bad debts. In the table which follows we present as regards capital invested the percentages representing the excess of selling price above cost of production and the percentages of net profits, by industries. The difference between these two percentages is a percentage of capital invested which represents interest, depreciation, selling expenses, and allowance for bad debts.

#### PERCENTAGES OF EXPENSES OF CAPITAL INVESTED.

INDUSTRIES.	PERCENTAGES OF CAPITAL INVESTED—		
	Represented by the Excess of Selling Price above Cost of Production	Represented by Net Profit	Represented by Interest, Depreciation, and Allowance
Agricultural implements, . . . . .	13.95	6.92	7.03
Arms and ammunition, . . . . .	11.12	3.36	7.76
Artificial teeth and dental work, . . . . .	117.36	97.90	19.46
Artisans' tools, . . . . .	14.27	6.05	8.22
Boots and shoes, . . . . .	35.39	14.06	21.33
Boxes (paper and wooden), . . . . .	25.18	12.85	12.33
Brick, tiles, and sewer pipe, . . . . .	11.81	5.72	6.09
Brooms, brushes, and mops, . . . . .	37.57	22.18	15.39
Building (including concrete walks, paving, etc.), . . . . .	61.94	40.54	21.40
Burial cases, caskets, coffins, etc., . . . . .	24.04	11.78	12.26

*Percentages of Expenses of Capital Invested—Continued.*

INDUSTRIES.	PERCENTAGES OF CAPITAL INVESTED—		
	Represented by the Excess of Selling Price above Cost of Production	Represented by Net Profit	Represented by Interest, Depreciation, and Allowance
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	9.62	0.24	9.38
Carriages and wagons, . . . . .	30.90	19.67	11.23
Charcoal and kindlers (including fireworks and matches), . . . . .	213.67	190.38	23.29
Chemical preparations, compounded (including fertilizers), . . . . .	15.35	5.62	9.83
Clothing, . . . . .	49.87	38.05	16.82
Cooking, lighting, and heating apparatus, . . . . .	31.09	20.24	10.85
Cordage and twine, . . . . .	12.17	1.04	11.13
Cotton goods, . . . . .	2.25	*—5.77	8.02
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	91.27	74.65	16.62
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	35.67	25.89	9.78
Electrical apparatus and appliances, . . . . .	5.17	*—2.88	8.05
Electroplating (including jewelry burnishing and lapidary work), . . . . .	75.00	56.79	18.21
Fancy articles (including fine arts and taxidermy), . . . . .	71.72	57.18	14.54
Flax, hemp, and jute goods (including linen), . . . . .	12.33	2.96	9.37
Food preparations (including salt), . . . . .	42.42	20.40	22.02
Furniture, . . . . .	16.10	5.60	10.50
Gas and residual products, . . . . .	14.14	7.92	6.22
Glass, . . . . .	28.49	17.73	10.76
Glue, isinglass, and starch, . . . . .	7.43	*—2.55	9.98
Hair work (animal and human), . . . . .	14.91	*—1.00	15.91
Hosiery and knit goods, . . . . .	14.56	4.09	10.47
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	47.61	34.92	12.69
Ivory, bone, shell, and horn goods, etc., . . . . .	25.08	15.42	9.66
Leather, . . . . .	24.62	8.18	16.49
Liquors and beverages (not spirituous), . . . . .	43.78	31.39	12.39
Liquors: malt, distilled, and fermented, . . . . .	34.35	24.43	9.92
Lumber, . . . . .	19.98	9.50	10.48
Machines and machinery, . . . . .	15.96	6.76	9.20
Metals and metallic goods (including clocks and watches), . . . . .	20.15	9.85	10.30
Models and patterns, . . . . .	95.31	75.48	19.83
Musical instruments and materials, . . . . .	26.88	15.95	10.88
Oils and illuminating fluids, . . . . .	0.98	*—9.34	10.32
Paints, colors, and crude chemicals (including dye-stuffs), . . . . .	11.78	1.15	10.63
Paper and paper goods, . . . . .	9.66	0.29	9.37
Photographs and photographic materials, . . . . .	53.53	39.84	13.69
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	37.17	26.09	11.08
Printing, publishing, and bookbinding, . . . . .	48.43	34.06	14.37

\* Net loss.

*Percentages of Expenses of Capital Invested—Concluded.*

INDUSTRIES.	PERCENTAGES OF CAPITAL INVESTED—		
	Represented by the Excess of Selling Price above Cost of Production	Represented by Net Profit	Represented by Interest, Depreciation, and Allowance
Print works, dye works, and bleacheries, . . . .	*—26.85	†—36.25	9.40
Railroad construction and equipment, . . . .	18.58	0.66	12.92
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	22.22	11.20	11.02
Scientific instruments and appliances, . . . . .	24.67	12.29	12.38
Shipbuilding (including awnings, tents, and decorations), . . . . .	68.88	47.00	16.88
Silk and silk goods (including buttons and dress trimmings), . . . . .	24.50	11.81	12.69
Sporting and athletic goods, . . . . .	38.10	24.79	18.81
Stone, . . . . .	31.38	20.11	11.27
Straw and palm leaf goods, . . . . .	23.86	9.85	14.01
Tallow, candles, soap, and grease, . . . . .	32.45	17.64	14.81
Tobacco, snuff, and cigars, . . . . .	34.19	16.73	17.46
Toys and games (children's), . . . . .	17.28	7.21	10.07
Trunks and valises, . . . . .	52.62	34.93	17.69
Whips, lashes, and stocks, . . . . .	42.52	32.01	10.51
Wooden goods (including corks, bungs, and taps), . .	28.48	16.71	11.77
Woollen goods, . . . . .	15.62	5.47	10.15
Worsted goods, . . . . .	12.17	2.20	9.97
ALL INDUSTRIES, . . . . .	16.01	4.83	11.18

\* See p. 365.

† Net loss.

For "All Industries" we find, as previously shown, that the excess of selling price above the cost of production is 16.01 per cent of capital invested, and net profit is 4.83 per cent of capital invested. The difference between these two percentages, or 11.18 per cent, is the percentage of capital invested used and necessary, as estimated by the Bureau, to pay interest, keep the plant in good working condition, pay selling expenses, and cover losses from bad debts. In 18 industries the proportion of "Expenses" of capital invested is under 10 per cent; in 42 industries, 10 but under 20 per cent; and in 4 industries, 20 but under 30 per cent.

The industries are arranged by name under their appropriate percentage heads in the following text-tabular classification:

*Under 10 per cent.*

Agricultural Implements.	Flax, Hemp, and Jute Goods (including Linen).
Arms and Ammunition.	Gas and Residual Products.
Artisans' Tools.	Glue, Isinglass, and Starch.
Brick, Tiles, and Sewer Pipe.	Ivory, Bone, Shell, and Horn Goods, etc.
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles).	Liquors: Malt, Distilled, and Fermented.
Chemical Preparations, Compounded (including Fertilizers).	Machines and Machinery.
Cotton Goods.	Paper and Paper Goods.
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Print Works, Dye Works, and Bleacheries.
Electrical Apparatus and Appliances.	Worsted Goods.

*10 per cent but under 20 per cent.*

Artificial Teeth and Dental Work.	Oils and Illuminating Fluids.
Boxes (Paper and Wooden).	Paints, Colors, and Crude Chemicals (including Dyestuffs).
Brooms, Brushes, and Mops.	Photographs and Photographic Materials.
Burial Cases, Caskets, Coffins, etc.	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).
Carriages and Wagons.	Printing, Publishing, and Bookbinding.
Clothing.	Railroad Construction and Equipment.
Cooking, Lighting, and Heating Apparatus.	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).
Cordage and Twine.	Scientific Instruments and Appliances.
Drugs and Medicines (including Perfumes, Toilet Articles, etc.).	Shipbuilding (including Awnings, Tents, and Decorations).
Electroplating (including Jewelry Burnishing and Lapidary Work).	Silk and Silk Goods (including Buttons and Dress Trimmings).
Fancy Articles (including Fine Arts and Taxidermy).	Sporting and Athletic Goods.
Furniture.	Stone.
Glass.	Straw and Palm Leaf Goods.
Hair Work (Animal and Human).	Tallow, Candles, Soap, and Grease.
Hosiery and Knit Goods.	Tobacco, Snuff, and Cigars.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Toys and Games (Children's).
Leather.	Trunks and Valises.
Liquors and Beverages (Not Spirituous).	Whips, Lashes, and Stocks.
Lumber.	Wooden Goods (including Corks, Bungs, and Taps).
Metals and Metallic Goods (including Clocks and Watches).	Woollen Goods.
Models and Patterns.	
Musical Instruments and Materials.	

*20 per cent but under 30 per cent.*

Boots and Shoes.	Charcoal and Kindlers (including
Building (including Concrete Walks,	Fireworks and Matches).
Paving, etc.).	Food Preparations (including Salt).

The industries in which the sum required for "Expenses" forms the greatest proportion of capital invested are: Charcoal and Kindlers (including Fireworks and Matches), 23.29 per cent; Food Preparations (including Salt), 22.02 per cent; and Building (including Concrete Walks, Paving, etc.), 21.40 per cent. The lowest proportions are found in Agricultural Implements with 7.03 per cent; Gas and Residual Products, 6.22 per cent; and Brick, Tiles, and Sewer Pipe, 6.09 per cent.

#### NUMBERS AND PERCENTAGES FOR PRIVATE FIRMS AND CORPORATIONS.

This presentation shows by industries as regards private firms and corporations, respectively,

1. The number of private firms.
2. The number of corporations.
3. The number of employés of private firms.
4. The number of employés of corporations.
5. The average yearly earnings of employés of private firms.
6. The average yearly earnings of employés of corporations.
7. The number of partners in private firms.
8. The number of stockholders in corporations.
9. The average investment by each partner.
10. The average investment by each stockholder.
11. The average net profit to each partner.
12. The average net profit to each stockholder.



RECAPITULATION. COMPARISON OF EARNINGS AND PROFITS. NUMBERS  
AND PERCENTAGES FOR PRIVATE FIRMS AND CORPORATIONS.

	INDUSTRIES.	PRIVATE FIRMS			
		Number of Private Firms	Number of Employés	Average Yearly Earnings	Number of Partners
1	Agricultural implements, . . . . .	24	121	\$437.50	19
2	Arms and ammunition, . . . . .	36	1,462	561.45	24
3	Artificial teeth and dental work, . . . . .	489	59	554.53	128
4	Artisans' tools, . . . . .	129	1,072	414.66	100
5	Boots and shoes, . . . . .	2,344	68,800	385.89	1,567
6	Boxes (paper and wooden), . . . . .	209	3,347	303.96	155
7	Brick, tiles, and sewer pipe, . . . . .	110	2,122	269.00	48
8	Brooms, brushes, and mops, . . . . .	68	888	316.77	52
9	Building (including concrete walks, paving, etc.),	3,784	34,106	364.92	1,490
10	Burial cases, caskets, coffins, etc., . . . . .	112	337	491.66	41
11	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	48	1,064	310.95	24
12	Carriages and wagons, . . . . .	1,009	4,800	452.13	591
13	Charcoal and kindlers (including fireworks and matches), . . . . .	15	108	192.37	4
14	Chemical preparations, compounded (including fertilizers), . . . . .	27	198	362.69	32
15	Clothing, . . . . .	2,387	18,929	296.90	1,013
16	Cooking, lighting, and heating apparatus, . . . . .	45	775	544.57	39
17	Cordage and twine, . . . . .	38	640	245.60	46
18	Cotton goods, . . . . .	54	3,496	268.53	72
19	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	918	662	374.02	189
20	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	34	366	465.12	31
21	Electrical apparatus and appliances, . . . . .	12	102	496.34	4
22	Electroplating (including jewelry burnishing and lapidary work), . . . . .	42	175	438.03	38
23	Fancy articles (including fine arts and taxidermy),	40	160	211.88	18
24	Flax, hemp, and jute goods (including linen), . . . . .	9	608	237.91	11
25	Food preparations (including salt), . . . . .	1,688	15,751	263.06	865
26	Furniture, . . . . .	588	7,432	415.34	416
27	Gas and residual products, . . . . .	3	8	440.50	-
28	Glass, . . . . .	14	183	420.60	16
29	Glue, isinglass, and starch, . . . . .	26	632	298.10	34
30	Hair work (animal and human), . . . . .	55	228	282.56	23
31	Hosiery and knit goods, . . . . .	51	1,563	223.07	37
32	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	26	102	321.48	18
33	Ivory, bone, shell, and horn goods, etc., . . . . .	35	538	316.60	35
34	Leather, . . . . .	693	9,559	442.15	489
35	Liquors and beverages (not spirituous), . . . . .	61	291	378.56	34
36	Liquors: malt, distilled, and fermented, . . . . .	215	1,603	426.67	124
37	Lumber, . . . . .	460	1,951	266.58	292
38	Machines and machinery, . . . . .	529	7,051	405.20	409
39	Metals and metallic goods (including clocks and watches), . . . . .	2,674	14,861	423.59	1,417

RECAPITULATION. COMPARISON OF EARNINGS AND PROFITS. NUMBERS  
AND PERCENTAGES FOR PRIVATE FIRMS AND CORPORATIONS.

PRIVATE FIRMS		CORPORATIONS						
Average Investment by Each Partner	Average Net Profit to Each Partner	Number of Corporations	Number of Employés	Average Yearly Earnings	Number of Stockholders	Average Investment by Each Stockholder	Average Net Profit to Each Stockholder	
\$6,950	\$481	6	738	\$400.70	62	\$31,364	\$2,172	1
58,064	1,952	4	209	560.22	145	5,950	200	2
594	581	-	-	-	-	-	-	3
11,639	704	11	930	484.14	611	3,667	221	4
16,974	2,247	22	2,731	417.06	336	4,554	640	5
9,575	1,230	6	244	386.05	45	7,514	966	6
11,575	663	4	758	128.21	57	6,043	346	7
8,947	1,985	4	89	313.07	1	800	176	8
3,099	1,256	9	830	420.62	87	2,328	941	9
5,935	699	1	30	314.57	40	743	88	10
39,560	93	15	6,277	285.60	572	13,561	32	11
5,158	1,014	4	251	428.94	97	3,909	769	12
2,738	5,212	1	22	363.64	168	53	101	13
8,418	465	13	670	475.54	161	20,915	1,155	14
5,680	1,877	15	2,016	238.96	187	4,485	1,482	15
13,542	2,741	20	1,644	479.56	222	4,474	905	16
14,858	155	14	2,105	265.06	256	12,051	126	17
50,013	* 2,891	111	59,615	268.00	12,043	8,158	* 471	18
3,127	2,334	8	188	344.26	18	6,606	4,931	19
9,899	2,555	4	204	331.43	26	3,893	1,008	20
8,130	* 234	28	652	585.04	1,340	1,417	* 41	21
2,621	1,488	-	-	-	-	-	-	22
2,459	1,406	1	2	200.00	-	-	-	23
20,773	615	3	1,376	247.61	41	51,220	1,516	24
11,142	2,273	33	2,486	270.22	386	9,042	1,845	25
12,643	708	15	1,249	430.10	319	7,484	419	26
-	-	68	1,677	397.80	2,967	2,694	213	27
5,348	948	6	907	458.16	174	1,741	309	28
23,274	* 593	3	66	214.42	8	2,338	* 60	29
7,613	* 76	-	-	-	-	-	-	30
25,296	1,035	9	2,451	281.35	417	7,218	295	31
8,957	1,382	2	58	256.90	-	-	-	32
8,630	1,330	4	436	369.43	74	19,645	3,029	33
17,321	1,403	6	171	509.45	39	13,098	1,065	34
5,124	1,609	2	33	296.36	19	429	135	35
30,938	7,556	3	125	760.54	89	6,189	1,512	36
4,668	444	6	267	370.62	32	6,251	594	37
11,241	760	93	9,598	457.68	1,181	10,649	720	38
6,399	630	105	15,771	436.68	2,455	8,082	796	39

\* Net loss.

*Recapitulation. Comparison of Earnings and Profits. Numbers and Percentages for Private Firms and Corporations—Concluded.*

	INDUSTRIES.	PRIVATE FIRMS			
		Number of Private Firms	Number of Employés	Average Yearly Earnings	Number of Partners
1	Models and patterns, . . . . .	51	180	\$514.01	40
2	Musical instruments and materials, . . . . .	82	2,235	582.09	81
3	Oils and illuminating fluids, . . . . .	24	193	427.93	14
4	Paints, colors, and crude chemicals (including dyestuffs), . . . . .	25	224	471.94	22
5	Paper and paper goods, . . . . .	90	2,903	344.81	116
6	Photographs and photographic materials, . . . . .	239	564	402.54	125
7	Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	70	405	599.70	45
8	Printing, publishing, and bookbinding, . . . . .	650	3,305	417.81	540
9	Print works, dye works, and bleacheries, . . . . .	80	1,497	346.25	66
10	Railroad construction and equipment, . . . . .	5	136	301.68	5
11	Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	25	1,288	309.97	23
12	Scientific instruments and appliances, . . . . .	60	375	390.57	40
13	Shipbuilding (including awnings, tents, and decorations), . . . . .	292	2,701	238.47	165
14	Silk and silk goods (including buttons and dress trimmings), . . . . .	16	854	300.76	17
15	Sporting and athletic goods, . . . . .	25	812	257.37	17
16	Stone, . . . . .	366	5,507	389.47	236
17	Straw and palm leaf goods, . . . . .	45	5,768	212.08	37
18	Tallow, candles, soap, and grease, . . . . .	162	668	420.21	99
19	Tobacco, snuff, and cigars, . . . . .	298	1,896	395.78	157
20	Toys and games (children's), . . . . .	13	200	314.26	14
21	Trunks and valises, . . . . .	25	229	344.38	18
22	Whips, lashes, and stocks, . . . . .	56	482	329.34	35
23	Wooden goods (including corks, bungs, and taps), . . . . .	532	3,380	393.97	344
24	Woolen goods, . . . . .	151	11,031	301.49	206
25	Worsted goods, . . . . .	15	2,054	250.43	18

In the preceding table the respective numbers of private firms and corporations and the number and average yearly earnings of employés in private firms and corporations are based upon returns from the 23,431 establishments included in the Industrial Statistics of 1885. The figures relating to the number of partners and stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the returns of the 10,013 establishments which made returns in the investigation as to profits.

One instance of the correct manner of reading the table will, undoubtedly, suffice for the other 63 industries. For an illus-

*Recapitulation. Comparison of Earnings and Profits. Numbers and Percentages for Private Firms and Corporations — Concluded.*

PRIVATE FIRMS		CORPORATIONS						
Average Investment by Each Partner	Average Net Profit to Each Partner	Number of Corporations	Number of Employés	Average Yearly Earnings	Number of Stockholders	Average Investment by Each Stockholder	Average Net Profit to Each Stockholder	
\$1,750	\$1,321	-	-	-	-	-	-	1
19,179	3,059	11	1,119	\$681.20	147	\$11,801	\$1,850	2
44,933	*4,198	4	328	377.01	5	94,849	*8,860	3
26,666	806	6	162	428.59	62	6,020	69	4
42,985	125	58	6,118	370.23	1,072	12,803	38	5
1,849	737	2	41	500.90	13	10,131	4,035	6
14,622	3,815	8	124	541.93	86	4,755	1,241	7
9,737	3,317	62	2,179	531.05	1,366	1,263	430	8
14,694	*5,327	16	7,474	315.14	1,117	11,455	*4,152	9
36,100	240	10	1,707	507.07	482	938	6	10
47,839	5,356	19	5,353	356.83	190	36,751	4,116	11
4,962	610	5	404	416.10	42	9,651	1,186	12
2,208	1,038	1	80	500.00	-	-	-	13
24,074	2,843	12	2,460	267.13	132	10,136	1,197	14
4,143	1,027	2	51	320.67	41	877	217	15
7,093	1,426	12	1,294	430.16	278	2,534	509	16
40,642	4,003	2	729	201.88	21	26,640	2,623	17
8,383	1,479	3	86	575.58	13	16,331	2,861	18
3,430	574	4	306	359.96	31	6,967	1,166	19
11,805	852	2	145	386.03	11	11,542	832	20
3,564	1,245	-	-	-	-	-	-	21
4,551	1,457	4	134	478.54	65	6,435	2,060	22
5,813	971	6	377	330.44	57	4,606	770	23
59,531	3,258	38	8,476	278.82	838	15,875	869	24
42,260	931	8	6,287	306.21	238	34,682	761	25

\* Net loss.

tration we will take Boots and Shoes. We find 2,344 private firms and 22 corporations engaged in the industry; the private firms employ 66,800 persons, the average yearly earnings of each being \$385.89; the corporations give employment to 2,731 persons, their average yearly earnings being \$417.06. The figures so far given relate to all establishments and employés in the industry as shown by the Decennial Census of 1885. The private firms reporting as regards profits were conducted by 1,567 partners, each of which had an average investment in the business amounting to \$15,974, upon which he realized a net profit of \$2,247. The corporations reporting as regards profits

had 336 stockholders, each of which had an average investment in the business of \$4,554, which paid him a net profit of \$640.

### EARNINGS AND PROFITS IN PRIVATE FIRMS.

In the subjoined table a classification is made of amounts representing either average annual earnings of employes of private firms, or average net profit to each partner belonging to a private firm. Opposite to the lines of this classification are placed the number of industries in which the average annual earnings of employes or the average net profits of partners fall within the limits of the classification.

CLASSIFICATION OF AMOUNTS.	NUMBER OF INDUSTRIES IN WHICH—	
	the Average Yearly Earnings of Each Employé of Private Firms are Shown by the Specified Amount	the Average Net Profit to Each Partner is Shown by the Specified Amount
Under \$100, . . . . .	-	1
\$100 but under \$200, . . . . .	1	2
\$200 but under \$300, . . . . .	15	1
\$300 but under \$400, . . . . .	23	1
\$400 but under \$500, . . . . .	19	3
\$500 but under \$600, . . . . .	6	2
\$600 but under \$700, . . . . .	-	5
\$700 but under \$800, . . . . .	-	4
\$800 but under \$900, . . . . .	-	1
\$900 but under \$1,000, . . . . .	-	3
\$1,000 but under \$1,500, . . . . .	-	10
\$1,500 but under \$2,000, . . . . .	-	4
\$2,000 but under \$2,500, . . . . .	-	3
\$2,500 but under \$3,000, . . . . .	-	3
\$3,000 but under \$3,500, . . . . .	-	3
\$3,500 but under \$4,000, . . . . .	-	1
\$4,000 but under \$4,500, . . . . .	-	1
\$5,000 but under \$5,500, . . . . .	-	2
\$7,500 but under \$8,000, . . . . .	-	1
Having a net loss, . . . . .	-	6
Not given, . . . . .	-	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64

This table supplies a graphic comparison of earnings and profits as regards private firms. The border line on wages in private firms is under \$600, the whole number of industries, or 64, coming within that figure limit. As regards profits, only 10 industries fall below \$600 as an average net profit, 47 industries showing an average net profit running above the \$600 limit.

The industries having the highest average yearly earnings are: Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.), \$599.70; Musical Instruments and Materials, \$582.09; and Arms and Ammunition, \$561.45. The industries reporting the lowest average yearly earnings are: Straw and

Palm Leaf Goods, \$212.08; Fancy Articles (including Fine Arts and Taxidermy), \$211.88; and Charcoal and Kindlers (including Fireworks and Matches), \$192.37.

The greatest average net profit is paid to partners in private firms by the following industries: Liquors: Malt, Distilled, and Fermented, \$7,556; Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.), \$5,356; and Charcoal and Kindlers (including Fireworks and Matches), \$5,212. The smallest average net profit paid to partners in private firms is shown by the following industries: Cordage and Twine, \$155; Paper and Paper Goods, \$125; and Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), \$93.

#### EARNINGS AND PROFITS IN CORPORATIONS.

In this presentation the average yearly earnings of employes of corporations and the average net profit of each stockholder in corporations are brought into direct comparison, both items being arranged by industries in accordance with a classification of amounts representing either earnings or profits.

CLASSIFICATION OF AMOUNTS.	NUMBER OF INDUSTRIES IN WHICH —	
	the Average Yearly Earnings of Each Employé of Corporations are Shown by the Specified Amount	the Average Net Profit to Each Stockholder is Shown by the Specified Amount
Under \$100, . . . . .	—	5
\$100 but under \$200, . . . . .	1	4
\$200 but under \$300, . . . . .	14	5
\$300 but under \$400, . . . . .	18	2
\$400 but under \$500, . . . . .	15	2
\$500 but under \$600, . . . . .	9	2
\$600 but under \$700, . . . . .	1	1
\$700 but under \$800, . . . . .	1	5
\$800 but under \$900, . . . . .	—	2
\$900 but under \$1,000, . . . . .	—	3
\$1,000 but under \$1,500, . . . . .	—	8
\$1,500 but under \$2,000, . . . . .	—	4
\$2,000 but under \$2,500, . . . . .	—	2
\$2,500 but under \$3,000, . . . . .	—	2
\$3,000 but under \$3,500, . . . . .	—	1
\$3,500 but under \$4,000, . . . . .	—	2
\$4,000 but under \$4,500, . . . . .	—	1
\$4,500 but under \$5,000, . . . . .	—	1
Having a net loss, . . . . .	—	5
Not given, . . . . .	5	8
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64

The earnings limit rises two points higher in corporations than in private firms, the limit in the above table being \$800 instead of \$600 as in the case of private firms, and the 64 industries fall within the \$800 line. There are 26 industries

in which the average net profit to each stockholder also falls under \$800. There are 25 industries in which the average net profit to each stockholder comes between \$800 and \$5,000.

The industries in which the employes of corporations make the highest average yearly earnings are: Liquors: Malt, Distilled, and Fermented, \$760.54; Musical Instruments and Materials, \$681.20; and Electrical Apparatus and Appliances, \$585.04. The industries in which the employes of corporations have the lowest average yearly earnings are: Straw and Palm Leaf Goods, \$201.88; Fancy Articles (including Fine Arts and Taxidermy), \$200; and Brick, Tiles, and Sewer Pipe, \$128.21.

The industries in which stockholders in corporations receive the greatest average net profit are: Drugs and Medicines (including Perfumes, Toilet Articles, etc.), \$4,931; Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.), \$4,116; and Photographs and Photographic Materials, \$4,035. The industries in which stockholders in corporations receive the smallest average net profit are: Paper and Paper Goods, \$38; Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles), \$32; and Railroad Construction and Equipment, \$6.

### EARNINGS AND PROFITS IN ALL INDUSTRIES.

We reproduce from page 399, *ante*, the comparison of earnings and profits for all industries, including private firms and corporations.

#### COMPARISON OF EARNINGS AND PROFITS. ALL INDUSTRIES.

[In this table the number and average yearly earnings of employes are drawn from the returns of 23,431 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 10,013 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 257,656 employes (both sexes and all ages), . . .	*\$362.23
Number of partners, . . . . .	12,558
Average investment by each partner, . . . . .	\$10,701
Average net profit to each partner, . . . . .	†\$517
<i>Corporations.</i>	
Average yearly earnings of 162,310 employes (both sexes and all ages), . . .	†\$333.22
Number of stockholders, . . . . .	30,967
Average investment by each stockholder, . . . . .	\$7,857
Average net profit to each stockholder, . . . . .	†\$379

\* For 22,482 private firms.

† For 949 corporations.

‡ Equivalent to 4.83 per cent on average investment.

The grand result is —

In private firms, each of 257,656 employés (including both sexes and all ages) receives an average of \$362.23 for annual earnings in return for his labor, while each of 12,558 partners in private firms, with an average investment of \$10,701, receives an average net profit of \$517 in return for his money investment and his labor.

In corporations, each of 162,310 employés (including both sexes and all ages) receives an average of \$333.22 for annual earnings in return for his labor, while each of 30,967 stockholders in corporations, with an average investment of \$7,857, receives an average net profit of \$379 in return for his money investment, mainly, as comparatively few stockholders render any personal service, unless paid salaries therefor, to the corporations in which they are financially interested.

It will be noticed that the percentage on average investment (4.83) is the same for partners in private firms and stockholders in corporations. The reason for this is that the net profits were figured for private firms and corporations combined and afterwards divided between the private firms and corporations in proportion to the capital invested. This course was a statistical necessity, for to have shown the *actual profits* in private firms and in corporations could only have been done by figuring out the profits separately in each of the 10,013 establishments, and then aggregating the results for the respective numbers of private firms and corporations. This would have required more time and money than the Bureau has at its disposal, and the plan pursued has been deemed adequate and just in its results to both private firms and corporations. From the data supplied, however, any one who dissents from the distribution of profits in accordance with capital invested has the means at hand from which to construct another mode of distribution which may be, in his opinion, more thoroughly indicative than the plan pursued by the Bureau.

#### RELATION OF EARNINGS TO PROFITS.

It is evident that if the employé of a private firm received as much for average yearly earnings as his employer secured in the way of profits, that the relation of earnings to profits, in the case cited, would be 100 per cent; that is, earnings and profits would be the same. If earnings were less than profits



the relation would be indicated by a percentage less than 100 per cent, while if earnings were greater than profits the relation would be indicated by a percentage greater than 100 per cent. The principles just explained are the ones upon which the following table is founded, in which we show, by industries, the percentage of average yearly earnings of employes of private firms of the average net profit to each partner, and, also, the percentage of average yearly earnings of employes of corporations of the average net profit to each stockholder :

INDUSTRIES.	Percentage of Average Yearly Earnings of each Employé of Private Firms of the Average Net Profit to each Partner	Percentage of Average Yearly Earnings of each Employé of Corporations of the Average Net Profit to each Stockholder
Agricultural implements, . . . . .	91.06	18.46
Arms and ammunition, . . . . .	28.74	280.00
Artificial teeth and dental work, . . . . .	95.52	-
Artisans' tools, . . . . .	58.95	219.00
Boots and shoes, . . . . .	17.18	65.16
Boxes (paper and wooden), . . . . .	24.72	39.96
Brick, tiles, and sewer pipe, . . . . .	40.57	36.99
Brooms, brushes, and mops, . . . . .	15.97	177.84
Building (including concrete walks, paving, etc.), . . . .	29.06	44.74
Burial cases, caskets, coffins, etc., . . . . .	70.39	357.95
Carpets (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	384.41	893.75
Carriages and wagons, . . . . .	44.58	55.79
Charcoal and kindlers (including fireworks and matches), .	3.68	360.40
Chemical preparations, compounded (including fertilizers), .	78.06	41.21
Clothing, . . . . .	15.82	16.13
Cooking, lighting, and heating apparatus, . . . . .	19.88	53.04
Cordage and twine, . . . . .	158.71	210.32
Cotton goods, . . . . .	*9.30	*56.90
Drugs and medicines (including perfumes, toilet articles, etc.),	16.02	6.98
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	18.20	32.84
Electrical apparatus and appliances, . . . . .	*211.97	*1,426.83
Electroplating (including jewelry burnishing and lapidary work), . . . . .	29.44	-
Fancy articles (including fine arts and taxidermy), . . . .	15.08	-
Flax, hemp, and jute goods (including linen), . . . . .	38.70	16.36
Food preparations (including salt), . . . . .	11.57	14.63
Furniture, . . . . .	58.62	102.63
Gas and residual products, . . . . .	-	186.85
Glass, . . . . .	44.41	148.22
Glue, isinglass, and starch, . . . . .	*50.25	*356.67
Hair work (animal and human), . . . . .	*372.37	-
Hosiery and knit goods, . . . . .	21.55	95.25
Ink, muclage, and paste (including crayons, pencils, cruci- bles, etc.), . . . . .	23.23	-

\* Net loss.

INDUSTRIES.	Percentage of Average Yearly Earnings of each Employé of Private Firms of the Average Net Profit to each Partner	Percentage of Average Yearly Earnings of each Employé of Corporations of the Average Net Profit to each Stockholder
Ivory, bone, shell, and horn goods, etc., . . . . .	23.83	12.18
Leather, . . . . .	31.39	47.79
Liquors and beverages (not spirituous), . . . . .	23.56	219.26
Liquors: malt, distilled, and fermented, . . . . .	5.65	50.33
Lumber, . . . . .	60.14	62.46
Machines and machinery, . . . . .	53.29	63.61
Metals and metallic goods (including clocks and watches), . . . . .	67.30	54.90
Models and patterns, . . . . .	38.91	-
Musical instruments and materials, . . . . .	19.08	36.81
Oils and illuminating fluids, . . . . .	*10.20	*4.26
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	154.25	621.74
Paper and paper goods, . . . . .	276.00	973.68
Photographs and photographic materials, . . . . .	54.68	12.42
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	15.73	43.67
Printing, publishing, and bookbinding, . . . . .	12.60	123.49
Print works, dye works, and bleacheries, . . . . .	*6.50	*7.59
Railroad construction and equipment, . . . . .	125.83	8,450.00
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	5.79	8.67
Scientific instruments and appliances, . . . . .	64.10	35.08
Shipbuilding (including awnings, tents, and decorations), . . . . .	22.93	-
Silk and silk goods (including buttons and dress trimmings), . . . . .	10.59	22.31
Sporting and athletic goods, . . . . .	25.02	147.93
Stone, . . . . .	27.28	84.48
Straw and palm leaf goods, . . . . .	5.30	7.70
Tallow, candles, soap, and grease, . . . . .	28.40	19.99
Tobacco, snuff, and cigars, . . . . .	68.99	30.67
Toys and games (children's), . . . . .	36.85	46.39
Trunks and valises, . . . . .	27.63	-
Whips, lashes, and stocks, . . . . .	22.58	23.25
Wooden goods (including corks, bungs, and taps), . . . . .	40.58	49.35
Woollen goods, . . . . .	9.24	32.11
Worsted goods, . . . . .	26.85	40.05
ALL INDUSTRIES, . . . . .	70.02	87.86

\* Net loss.

The general results for all industries are: first, in private firms, the percentage of the average yearly earnings of each employé of the average net profit to each partner is 70.02, or a little more than seven-tenths; second, in corporations, the percentage of the average yearly earnings of each employé of the average net profit to each stockholder is 87.86, or a little more than seven-eighths. These figures show the narrow money margin between the earnings of employés and the net profits of partners and stockholders.

We bring into a percentage classification by industries the results as regards private firms and corporations.

PERCENTAGES OF AVERAGE ANNUAL EARNINGS OF AVERAGE NET PROFITS.	NUMBER OF INDUSTRIES	
	Private Firms	Corporations
Under 10 per cent, . . . . .	5	3
10 but under 20 per cent, . . . . .	12	7
20 but under 30 per cent, . . . . .	15	2
30 but under 40 per cent, . . . . .	4	7
40 but under 50 per cent, . . . . .	4	7
50 but under 60 per cent, . . . . .	4	4
60 but under 70 per cent, . . . . .	4	3
70 but under 80 per cent, . . . . .	2	-
80 but under 90 per cent, . . . . .	-	1
90 but under 100 per cent, . . . . .	2	1
Above 100 per cent, . . . . .	5	16
Not given (no private firms), . . . . .	1	-
Not given (no corporations), . . . . .	-	7
WHOLE NUMBER OF INDUSTRIES CONSIDERED, . . .	58	58

We present a combined text-tabular classification of industries by name under their appropriate percentage heads, the arrangement for private firms being in the *left hand* column, while the presentation for corporations forms the *right hand* column.

## PRIVATE FIRMS.

## CORPORATIONS.

*Under 10 per cent.*

Charcoal and Kindlers (including  
Fireworks and Matches).

Liquors: Malt, Distilled, and Fer-  
mented.

Rubber and Elastic Goods (including  
Hose: Rubber, Linen, etc.).

Straw and Palm Leaf Goods.

Woollen Goods.

Drugs and Medicines (including  
Perfumes, Toilet Articles, etc.).

Rubber and Elastic Goods (includ-  
ing Hose: Rubber, Linen, etc.).

Straw and Palm Leaf Goods.

*10 per cent but under 20 per cent.*

Boots and Shoes.

Brooms, Brushes, and Mops.

Clothing.

Cooking, Lighting, and Heating Ap-  
paratus.

Drugs and Medicines (including Per-  
fumes, Toilet Articles, etc.).

Earthen, Plaster, and Stone Ware  
(including Cement, Kaolin, Lime,  
and Plaster).

Agricultural Implements.

Clothing.

Flax, Hemp, and Jute Goods (in-  
cluding Linen).

Food Preparations (including Salt).

Ivory, Bone, Shell, and Horn Goods,  
etc.

Photographs and Photographic Ma-  
terials.

## PRIVATE FIRMS.

## CORPORATIONS.

*10 per cent but under 20 per cent—Concluded.*

- |   |                                    |
|---|------------------------------------|
| Fancy Articles (including Fine Arts and Taxidermy).                     | Tallow, Candles, Soap, and Grease. |
| Food Preparations (including Salt).                                     |                                    |
| Musical Instruments and Materials.                                      |                                    |
| Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.). |                                    |
| Printing, Publishing, and Bookbinding.                                  |                                    |
| Silk and Silk Goods (including Buttons and Dress Trimmings).            |                                    |

*20 per cent but under 30 per cent.*

- |   |  |
|---|--|
| Arms and Ammunition.  | Silk and Silk Goods (including Buttons and Dress Trimmings). |
| Boxes (Paper and Wooden).   | Whips, Lashes, and Stocks.                                   |
| Building (including Concrete Walks, Paving, etc.).                      |  |
| Electroplating (including Jewelry Burnishing and Lapidary Work).        |  |
| Hosiery and Knit Goods.   |  |
| Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.). |  |
| Ivory, Bone, Shell, and Horn Goods, etc.                                |  |
| Liquors and Beverages (Not Spirituous).                                 |  |
| Shipbuilding (including Awnings, Tents, and Decorations).               |  |
| Sporting and Athletic Goods.  |  |
| Stone.  |  |
| Tallow, Candles, Soap, and Grease.                                      |  |
| Trunks and Valises.   |  |
| Whips, Lashes, and Stocks.  |  |
| Worsted Goods.  |  |

*30 per cent but under 40 per cent.*

- |   |   |
|---|---|
| Flax, Hemp, and Jute Goods (including Linen). | Boxes (Paper and Wooden).   |
| Leather.                                      | Brick, Tiles, and Sewer Pipe.   |
| Models and Patterns.                          | Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster). |
| Toys and Games (Children's).                  | Musical Instruments and Materials.  |
|   | Scientific Instruments and Appliances.  |
|   | Tobacco, Snuff, and Cigars.   |
|   | Woollen Goods.  |

## PRIVATE FIRMS.

## CORPORATIONS.

*40 per cent but under 50 per cent.*

Brick, Tiles, and Sewer Pipe.  
 Carriages and Wagons.  
 Glass.  
 Wooden Goods (including Corks,  
 Bungs, and Taps).

Building (including Concrete Walks,  
 Paving, etc.).  
 Chemical Preparations, Compounded  
 (including Fertilizers).  
 Leather.  
 Polishes and Dressing (including Em-  
 ery and Sand Paper and Cloth, etc.).  
 Toys and Games (Children's).  
 Wooden Goods (including Corks,  
 Bungs, and Taps).  
 Worsteds Goods.

*50 per cent but under 60 per cent.*

Artisans' Tools.  
 Furniture.  
 Machines and Machinery.  
 Photographs and Photographic Ma-  
 terials.

Carriages and Wagons.  
 Cooking, Lighting, and Heating Ap-  
 paratus.  
 Liquors: Malt, Distilled, and Fer-  
 mented.  
 Metals and Metallic Goods (includ-  
 ing Clocks and Watches).

*60 per cent but under 70 per cent.*

Lumber.  
 Metals and Metallic Goods (includ-  
 ing Clocks and Watches).  
 Scientific Instruments and Appli-  
 ances.  
 Tobacco, Snuff, and Cigars.

Boots and Shoes.  
 Lumber.  
 Machines and Machinery.

*70 per cent but under 80 per cent.*

Burial Cases, Caskets, Coffins, etc.  
 Chemical Preparations, Compounded  
 (including Fertilizers).

*80 per cent but under 90 per cent.*

Stone.

*90 per cent but under 100 per cent.*

Agricultural Implements.  
 Artificial Teeth and Dental Work.

Hosiery and Knit Goods.

*Above 100 per cent.*

Carpetings (including Cotton, Wool-  
 len, and Other Textiles, and Mixed  
 Textiles).  
 Cordage and Twine.  
 Paints, Colors, and Crude Chemicals  
 (including Dyestuffs).  
 Paper and Paper Goods.

Arms and Ammunition.  
 Artisans' Tools.  
 Brooms, Brushes, and Mops.  
 Burial Cases, Caskets, Coffins, etc.  
 Carpetings (including Cotton, Wool-  
 len, and Other Textiles, and Mixed  
 Textiles).

## PRIVATE FIRMS.

## CORPORATIONS.

*Above 100 per cent — Concluded.*

Railroad Construction and Equipment.

Charcoal and Kindlers (including Fireworks and Matches).  
 Cordage and Twine.  
 Furniture.  
 Gas and Residual Products.  
 Glass.  
 Liquors and Beverages (Not Spirituous).  
 Paints, Colors, and Crude Chemicals (including Dyestuffs).  
 Paper and Paper Goods.  
 Printing, Publishing, and Bookbinding.  
 Railroad Construction and Equipment.  
 Sporting and Athletic Goods.

*No private firms.*

Gas and Residual Products.

*No corporations.*

Artificial Teeth and Dental Work.  
 Electroplating (including Jewelry Burnishing and Lapidary Work).  
 Fancy Articles (including Fine Arts and Taxidermy).  
 Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).  
 Models and Patterns.  
 Shipbuilding (including Awnings, Tents, and Decorations).  
 Trunks and Valises.

Comparing the two presentations as regards highest and lowest percentages of annual yearly earnings of average net profit, we secure the following results :

PRIVATE FIRMS.		CORPORATIONS.	
<i>Highest.</i>	Percentages	<i>Highest.</i>	Percentages
Carpetings (including cotton, woolen, and other textiles, and mixed textiles), . . . .	834.41	Railroad construction and equipment, . . . .	8,450.00
Paper and paper goods, . . . .	276.00	Paper and paper goods, . . . .	973.68
Cordage and twine, . . . .	168.71	Carpetings (including cotton, woolen, and other textiles, and mixed textiles), . . . .	893.75
<i>Lowest.</i>	Percentages	<i>Lowest.</i>	Percentages
Liquors: malt, distilled, and fermented, . . . .	5.65	Rubber and elastic goods (including hose: rubber, linen, etc.), . .	8.67
Straw and palm leaf goods, . . . .	5.30	Straw and palm leaf goods, . . . .	7.70
Charcoal and kindlers (including fireworks and matches), . . . .	8.68	Drugs and medicines (including perfumes, toilet articles, etc.), . .	6.98

## THE ULTIMATE TABLES.

Up to this point we have dealt with the actual facts relating to profits and earnings drawn from the certified returns for 10,013 manufacturing establishments. We have considered 64 industries in detail, presenting for each the capital invested, and this same capital classified by items; selling price; cost of production; relation of cost of production to selling price and to capital invested; distribution of excess of selling price above cost of production, showing the relation of net profit to selling price and to capital invested; and a comparison of earnings and profits in which the earnings of employes of private firms are brought into direct comparison with the net profits of partners in private firms, and the earnings of employes of corporations are compared directly with the net profits of stockholders in corporations. It is our purpose in "The Ultimate Tables" to go beyond the existing conditions and endeavor to show what the conditions would have been if different plans of dividing the amount derived from the business had been put in operation.

Before presenting the ultimate tables they may be advantageously summarized.

Table I. shows the possible financial returns to employes if the *net profits* are added to the *wages fund* and the combined amount is divided equally among the employes. We consider this table under the heading "**Net Profits to Labor.**"

Table II. shows the possible financial returns to employes if the *gross profits* (excess of selling price above cost of production) are added to the *wages fund* and the combined amount is divided equally among the employes. This table and its analysis come under the heading "**Gross Profits to Labor.**"

Table III. brings together the percentages of increase or decrease in the financial returns to employes based upon the presentations in Tables I. and II. The table and its analysis are given under the heading "**All Profits to Labor: Percentages.**"

With respect to the plans of distribution upon which these three tables are based, the word "ultimate" is used to indicate

the lines beyond which it would be impossible to pass. In point of fact it would not be possible, of course, to reach these extremes, as the personal service of the manufacturer, in either case, would be left unrewarded.

Table IV. is based upon a new hypothesis: viz., that the *net profits* and *wages fund* be combined, the aggregate amount being divided equally among the employes, partners in private firms, and stockholders in corporations. The table and its analysis are considered under the heading "**Share and Share Alike.**"

Table V. brings into comparison the average annual earnings of employes in private firms and corporations, the net profits of partners and stockholders, and the possible financial returns to employes, partners, and stockholders if wages and profits are divided upon the "share and share alike" plan. The table and its analysis form the section headed "**The Grand Balance Sheet.**"

### NET PROFITS TO LABOR.

The table shows, first, the average annual earnings of employes in private firms, corporations, and in all establishments, meaning, by this latter term, private firms and corporations combined; second, the possible addition (or reduction in case of loss) if net profits are added to (or net losses are subtracted from) the wages fund; third, the possible annual income to employes from combined net profits (or loss) and wages fund. The second and third details include specifications for private firms, corporations, and all establishments. In each presentation, by employes is meant all persons employed, whether male or female, and without distinction of age. For the purposes of this consideration it becomes necessary to thus merge the higher earnings of male adults with the lower earnings of women and children.

The distribution of net profits and the wages fund, on the plan just outlined, in 64 industries, is given in the following table:



	INDUSTRIES.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN—		
		Private Firms	Corporations	All Establishments
1	Agricultural implements, . . . . .	\$437.50	\$400.70	\$405.33
2	Arms and ammunition, . . . . .	561.45	560.22	561.30
3	Artificial teeth and dental work, . . . . .	554.58	—	554.58
4	Artisans' tools, . . . . .	414.66	484.14	446.94
5	Boots and shoes, . . . . .	385.89	417.06	387.12
6	Boxes (paper and wooden), . . . . .	303.96	386.05	309.54
7	Brick, tiles, and sewer pipe, . . . . .	260.00	123.21	231.95
8	Brooms, brushes, and mops, . . . . .	316.77	313.07	316.44
9	Building (including concrete walks, paving, etc.), . . . . .	364.92	420.63	368.55
10	Burial cases, caskets, coffins, etc., . . . . .	491.66	314.57	477.19
11	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	310.95	285.60	289.27
12	Carriages and wagons, . . . . .	452.13	428.94	450.06
13	Charcoal and kindlers (including fireworks and matches), . . . . .	192.37	363.64	222.51
14	Chemical preparations, compounded (including fertilizers), . . . . .	362.69	475.54	450.51
15	Clothing, . . . . .	296.90	238.96	291.32
16	Cooking, lighting, and heating apparatus, . . . . .	544.57	479.56	500.39
17	Cordage and twine, . . . . .	245.60	265.06	260.52
18	Cotton goods, . . . . .	268.53	268.00	268.03
19	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	374.02	344.26	367.44
20	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	465.12	331.43	417.27
21	Electrical apparatus and appliances, . . . . .	496.34	585.04	573.94
22	Electroplating (including jewelry burnishing and lapidary work), . . . . .	438.03	—	438.03
23	Fancy articles (including fine arts and taxidermy), . . . . .	211.88	200.00	211.73
24	Flax, hemp, and jute goods (including linen), . . . . .	237.91	247.61	244.64
25	Food preparations (including salt), . . . . .	263.06	270.22	264.03
26	Furniture, . . . . .	415.34	430.10	417.47
27	Gas and residual products, . . . . .	440.50	397.80	398.00
28	Glass, . . . . .	420.60	458.16	451.83
29	Glue, isinglass, and starch, . . . . .	298.10	214.42	290.19
30	Hair work (animal and human), . . . . .	282.86	—	282.86
31	Hosiery and knit goods, . . . . .	223.07	231.35	258.39
32	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	321.48	256.90	299.07
33	Ivory, bone, shell, and horn goods, etc., . . . . .	316.60	369.43	340.25
34	Leather, . . . . .	442.16	509.45	443.34
35	Liquors and beverages (not spirituous), . . . . .	378.56	296.36	370.19
36	Liquors: malt, distilled, and fermented, . . . . .	426.67	700.54	450.82
37	Lumber, . . . . .	266.58	370.62	271.53
38	Machines and machinery, . . . . .	405.20	457.68	436.45
39	Metals and metallic goods (including clocks and watches), . . . . .	423.59	436.68	430.44
40	Models and patterns, . . . . .	514.01	—	514.01
41	Musical instruments and materials, . . . . .	582.09	681.20	615.16
42	Oils and illuminating fluids, . . . . .	427.93	377.01	395.67

POSSIBLE ADDITION (OR REDUCTION) IF NET PROFITS (OR LOSS) ARE ADDED TO (OR SUB- TRACTED FROM) THE WAGES FUND IN—			POSSIBLE ANNUAL INCOME TO EMPLOYEES FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND IN—			
Private Firms	Corporations	All Establishments	Private Firms	Corporations	All Establishments	
\$107.83	\$186.22	\$175.18	\$545.33	\$586.92	\$581.06	1
78.07	138.73	85.23	639.62	698.95	646.53	2
4,150.14	-	4,150.14	4,704.72	-	4,704.72	3
77.12	150.91	111.40	491.78	635.05	558.34	4
67.86	107.32	69.41	453.75	524.38	456.53	5
82.34	179.17	88.92	386.80	565.22	398.46	6
32.87	78.83	44.97	301.87	207.04	276.92	7
137.62	305.16	152.88	454.39	618.23	469.32	8
130.38	186.14	131.71	495.30	606.76	497.96	9
139.31	116.67	137.46	630.97	431.24	614.65	10
3.06	4.13	3.98	314.01	289.73	293.25	11
181.32	297.00	187.07	633.45	725.94	638.06	12
1,172.49	726.86	1,094.06	1,364.86	1,090.50	1,316.57	13
105.82	309.44	263.90	468.51	784.98	714.21	14
192.06	229.28	195.64	488.96	468.24	486.96	15
190.15	285.68	255.07	734.72	765.24	755.46	16
12.35	17.31	16.15	257.95	282.37	276.67	17
*94.58	*109.66	*108.82	†173.95	†158.34	†159.21	18
1,454.17	1,750.20	1,519.64	1,828.19	2,094.46	1,887.08	19
266.58	177.16	234.58	731.70	508.59	651.85	20
*28.98	*110.73	*99.67	†467.36	†474.31	†473.37	21
370.06	-	370.06	808.09	-	808.09	22
222.41	171.50	221.78	434.29	371.60	433.51	23
17.24	48.18	36.61	255.15	292.79	281.25	24
210.09	381.17	233.41	473.15	651.39	497.44	25
51.60	110.60	60.09	466.94	540.70	477.56	26
580.38	699.29	698.73	1,020.88	1,097.09	1,066.73	27
86.57	161.96	149.30	507.17	620.12	601.15	28
*44.81	*58.48	*46.10	†253.29	†155.94	†244.09	29
*9.30	-	*9.30	†273.56	-	†273.56	30
27.24	50.23	41.17	250.31	331.58	299.56	31
301.66	751.03	464.56	623.14	1,007.93	762.63	32
128.23	694.30	381.63	441.83	1,063.73	721.88	33
99.71	252.36	102.39	541.86	761.81	545.73	34
407.59	481.91	415.16	786.15	778.27	785.35	35
828.78	1,428.42	872.16	1,255.45	2,188.96	1,322.98	36
123.71	134.17	124.97	390.29	504.79	396.49	37
70.67	122.34	100.45	475.87	580.02	535.90	38
88.63	160.12	126.05	512.22	596.80	556.49	39
410.41	-	410.41	924.42	-	924.42	40
194.82	316.37	235.37	776.91	997.57	850.53	41
*377.11	*288.03	*321.03	†50.82	†88.98	†74.84	42

\* Loss.

† After loss is deducted.

INDUSTRIES.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN —		
	Private Firms	Corporations	All Establishments
1 Paints, colors, and crude chemicals (including dyestuffs), . . . . .	\$471.04	\$428.50	\$453.74
2 Paper and paper goods, . . . . .	344.81	370.23	362.06
3 Photographs and photographic materials, . . . . .	402.54	500.90	409.21
4 Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	599.70	541.93	586.16
5 Printing, publishing, and bookbinding, . . . . .	417.81	531.05	441.35
6 Print works, dye works, and bleacheries, . . . . .	346.25	315.14	320.33
7 Railroad construction and equipment, . . . . .	301.68	507.07	401.91
8 Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	309.97	356.83	347.74
9 Scientific instruments and appliances, . . . . .	390.57	416.10	403.81
10 Shipbuilding (including awnings, tents, and decorations), . . . . .	238.47	500.00	245.99
11 Silk and silk goods (including buttons and dress trimmings), . . . . .	300.76	267.13	275.90
12 Sporting and athletic goods, . . . . .	257.37	320.67	281.11
13 Stone, . . . . .	339.47	430.16	397.22
14 Straw and palm leaf goods, . . . . .	212.08	201.88	210.93
15 Tallow, candles, soap, and grease, . . . . .	420.21	575.58	437.95
16 Tobacco, snuff, and cigars, . . . . .	395.78	359.96	390.81
17 Toys and games (children's), . . . . .	314.26	386.03	344.42
18 Trunks and valises, . . . . .	344.38	-	344.38
19 Whips, lashes, and stocks, . . . . .	329.34	478.54	381.79
20 Woodengoods (including corks, bungs, and taps), . . . . .	393.97	390.44	392.61
21 Woollen goods, . . . . .	301.49	278.82	291.64
22 Worsted goods, . . . . .	250.43	306.21	292.47

To bring the results contained in the preceding table into shape for intelligent and ready consideration, we present, on page 567, a table which shows the number of industries (64 in all) which fall under the various classification heads formed by combining a "classification of amounts" with the headings of the 9 columns in the preceding table.

The 6 industries in which a loss occurs are given in a line by themselves. Print Works, Dye Works, and Bleacheries is the only industry in which the combination of profits with the wages fund leaves a deficit before division, and then only in the case of corporations and "all establishments." In the other 5 industries, which had a net loss, a reduction in income takes place, but the reduction is not so great but that an income is still left, although this diminution in income requires that the results should be considered as losses in this and succeeding tables.

POSSIBLE ADDITION (OR REDUCTION) IF NET PROFITS (OR LOSS) ARE ADDED TO (OR SUB- TRACTED FROM) THE WAGES FUND IN—			POSSIBLE ANNUAL INCOME TO EMPLOYEES FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND IN—			
Private Firms	Corporations	All Establishments	Private Firms	Corporations	All Establishments	
\$36.06	\$29.26	\$33.20	\$508.00	\$457.85	\$486.94	1
6.30	7.61	7.19	351.11	377.84	369.24	2
321.64	1,279.44	386.55	724.18	1,780.34	795.76	3
839.93	1,198.30	923.93	1,439.63	1,740.23	1,510.09	4
342.62	344.00	342.91	760.43	875.05	784.26	5
<b>*277.85</b>	<b>*729.76</b>	<b>*654.34</b>	<b>†68.40</b>	<b>†729.76</b>	<b>†654.34</b>	6
8.82	5.51	5.76	310.50	512.58	497.67	7
124.79	203.84	188.51	434.76	560.67	536.25	8
124.15	130.42	127.40	514.72	546.52	531.21	9
174.03	881.25	194.37	412.50	1,381.25	440.36	10
88.45	96.30	94.28	389.21	363.43	370.08	11
103.01	187.51	108.00	360.38	608.18	369.11	12
108.03	137.93	113.72	497.50	568.09	510.94	13
41.68	75.57	45.48	253.76	277.45	256.41	14
338.23	591.34	367.10	758.44	1,166.92	805.03	15
76.58	118.11	82.35	472.36	478.07	473.16	16
60.96	63.14	61.87	375.22	449.17	406.29	17
196.17	—	196.17	540.55	—	540.55	18
332.97	999.25	477.91	662.31	1,477.79	839.70	19
144.15	188.40	148.59	538.12	568.84	541.20	20
72.60	99.19	84.15	374.09	378.01	375.79	21
22.54	30.14	28.27	272.97	336.35	320.74	22

\* Loss. † After loss is deducted. ‡ Loss, not including average annual earnings.

## NET PROFITS TO LABOR: FOR 64 INDUSTRIES.

CLASSIFICATION OF AMOUNTS.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN—			POSSIBLE ADDITION IF NET PROFITS ARE ADDED TO THE WAGES FUND IN—			POSSIBLE ANNUAL INCOME TO EMPLOYEES FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND IN—		
	Private Firms	Corpo- rations	All Es- tablish- ments	Private Firms	Corpo- rations	All Es- tablish- ments	Private Firms	Corpo- rations	All Es- tablish- ments
Under \$100.	—	—	—	23	13	18	2	1	1
\$100 but under \$200.	1	1	—	18	19	19	1	2	1
\$200 but under \$300.	15	44	20	3	5	6	7	5	8
\$300 but under \$400.	23	18	18	6	5	5	10	6	7
\$400 but under \$500.	19	15	19	2	1	4	16	6	13
\$500 but under \$600.	6	9	6	1	1	—	8	14	10
\$600 but under \$700.	—	1	1	—	2	1	5	6	5
\$700 but under \$800.	—	1	—	—	2	—	7	5	7
\$800 but under \$900.	—	—	—	2	1	1	1	1	4
\$900 but under \$1,000.	—	—	—	—	1	1	1	1	1
\$1,000 and over.	—	—	—	3	4	3	6	11	6
Not given.	—	*5	—	—	*5	—	—	*5	—
Showing a loss.	—	—	—	6	5	6	—	‡	1
WHOLE NUMBER OF INDUSTRIES.	64	64	64	64	64	64	64	64	64

\* No corporations in 5 industries.

Considering private firms, in no industry do the average annual earnings of both sexes and all ages reach \$600; if net profits had been added to the wages fund, the employes in private firms in 20 industries would have had an annual income of more than \$600. In the case of corporations, in no industry do the average annual earnings of both sexes and all ages reach \$800; if net profits had been added to the wages fund, the employes in corporations in 13 industries would have had an annual income of more than \$800. Taking all establishments we find that in no industry do the average annual earnings of both sexes and all ages reach \$700; if net profits had been added to the wages fund, the employes in 18 industries, including private firms and corporations, would have had an annual income of more than \$700.

In the following text-tabular presentation, the 63 industries are classified in accordance with the "possible annual income to employes from combined net profits (or loss) and the wages fund for all establishments." Together with each industry is given, in parenthesis, the average annual earnings for both sexes and all ages (in all establishments). In case of *loss*, an asterisk (\*) is prefixed to the name of the industry. This presentation supplies a means of ascertaining the effect of the plan of estimate upon each industry.

*Under \$100.*

\* Oils and Illuminating Fluids (\$395.87).

*\$100 but under \$200.*

\* Cotton Goods (\$268.03).

*\$200 but under \$300.*

Brick, Tiles, and Sewer Pipe (\$231.95).	* Glue, Isinglass, and Starch (\$290.19).
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles) (\$289.27).	* Hair Work (Animal and Human) (\$282.86).
Cordage and Twine (\$260.52).	Hosiery and Knit Goods (\$258.39).
Flax, Hemp, and Jute Goods (including Linen) (\$244.64).	Straw and Palm Leaf Goods (\$210.93).

*\$300 but under \$400.*

Boxes (Paper and Wooden) (\$309.54).	Sporting and Athletic Goods (\$261.11).
Lumber (\$271.52).	Woollen Goods (\$291.64).
Paper and Paper Goods (\$362.05).	Worsted Goods (\$292.47).
Silk and Silk Goods (including Buttons and Dress Trimmings) (\$275.80).	

*\$400 but under \$500.*

Boots and Shoes (\$387.12).	Furniture (\$417.47).
Brooms, Brushes, and Mops (\$316.44).	Paints, Colors, and Crude Chemicals (including Dyestuffs) (\$453.74).
Building (including Concrete Walks, Paving, etc.) (\$366.25).	Railroad Construction and Equipment (\$491.91).
Clothing (\$291.32).	Shipbuilding (including Awnings, Tents, and Decorations) (\$245.99).
* Electrical Apparatus and Appliances (\$573.04).	Tobacco, Snuff, and Cigars (\$390.81).
Fancy Articles (including Fine Arts and Taxidermy) (\$211.73).	Toys and Games (Children's) (\$344.42).
Food Preparations (including Salt) (\$264.03).	

*\$500 but under \$600.*

Agricultural Implements (\$405.88).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.) (\$347.74).
Artisans' Tools (\$446.94).	Scientific Instruments and Appliances (\$403.81).
Leather (\$443.34).	Stone (\$397.22).
Machines and Machinery (\$435.45).	Trunks and Valises (\$344.38).
Metals and Metallic Goods (including Clocks and Watches) (\$430.44).	Wooden Goods (including Corks, Bungs, and Taps) (\$392.61).

*\$600 but under \$700.*

Arms and Ammunition (\$561.30).	Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster) (\$417.27).
Burial Cases, Caskets, Coffins, etc. (\$477.19).	Glass (\$451.85).
Carriages and Wagons (\$450.98).	

*\$700 but under \$800.*

Chemical Preparations, Compounded (including Fertilizers) (\$450.31).	Ivory, Bone, Shell, and Horn Goods, etc. (\$340.25).
Cooking, Lighting, and Heating Apparatus (\$500.39).	Liquors and Beverages (Not Spirituous) (\$370.19).
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.) (\$298.07).	Photographs and Photographic Materials (\$409.21).
	Printing, Publishing, and Bookbinding (\$441.35).

*\$800 but under \$900.*

Electroplating (including Jewelry Burnishing and Lapidary Work) (\$438.03).	Tallow, Candles, Soap, and Grease (\$437.93).
Musical Instruments and Materials (\$615.16).	Whips, Lashes, and Stocks (\$361.79).

*\$900 but under \$1,000.*

Models and Patterns (\$514.01).
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*\$1,000 but under \$1,500.*

Charcoal and Kindlers (including Fireworks and Matches) (\$222.51).  
 Gas and Residual Products (\$398.00).  
 Liquors: Malt, Distilled, and Fermented (\$450.82).

*\$1,500 but under \$2,000.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.) (\$367.44).  
 Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.) (\$586.16).

*\$4,500 but under \$5,000.*

Artificial Teeth and Dental Work (\$554.58).

In order to show the selling price (value of goods made and work done) under the various classifications of "possible annual income," we present a table in which the information is given, together with a column of percentages which shows the proportional value of product from which the "possible annual income" would be derived.

CLASSIFICATION OF POSSIBLE ANNUAL INCOME.	Number of Industries	Value of Goods Made and Work Done	Percentages of Value of Goods Made and Work Done
Under \$100, . . . . .	1	\$2,294,931	0.34
\$100 but under \$200, . . . . .	1	61,425,097	9.11
\$200 but under \$300, . . . . .	8	31,646,240	4.69
\$300 but under \$400, . . . . .	7	77,727,261	11.52
\$400 but under \$500, . . . . .	13	292,538,530	43.36
\$500 but under \$600, . . . . .	10	122,288,648	18.13
\$600 but under \$700, . . . . .	5	11,872,182	1.76
\$700 but under \$800, . . . . .	7	27,070,088	4.01
\$800 but under \$900, . . . . .	4	10,934,306	1.62
\$900 but under \$1,000, . . . . .	1	258,242	0.04
\$1,000 but under \$1,500, . . . . .	3	12,567,892	1.86
\$1,500 but under \$2,000, . . . . .	2	7,487,152	1.11
\$4,500 but under \$5,000, . . . . .	1	651,857	0.10
Showing a loss, . . . . .	1	15,890,843	2.35
TOTALS, . . . . .	64	\$674,634,269	100.00

This table brings out some valuable points of information, which are, that if net profits are added to the wages fund and divided equally among the employes, 14.14 per cent of the total value of manufactured product would be made by employes receiving less than \$300 annually as earnings; 73.01 per cent of the total product would be the result of the labor of employes receiving \$300 but under \$600 per year, while for their labor on 10.50 per cent of the total product the employes would receive between \$600 and \$5,000.

To close the present consideration of "Net Profits to Labor," we present an aggregation for All Industries.

## NET PROFITS TO LABOR. ALL INDUSTRIES.

CLASSIFICATION.	Private Firms	Corporations	All Establishments
Average annual earnings (both sexes and all ages) in —	\$362.23	\$333.22	\$351.02
Possible addition (or reduction) if net profits (or loss) are added to (or subtracted from) the wages fund in —	+37.47	+89.44	+57.55
Possible annual income to employes from combined net profits (or loss) and wages fund in —	399.70	422.66	408.57

We have shown, in the table on pages 564-567, the additions to average annual earnings, in each industry, by combining net profits with the wages fund (making proper allowances for loss). Nothing could show more forcibly, than does the preceding table, the narrow margin of profit in the manufacturing industries of Massachusetts. We will summarize the table in text form.

1. The employé of a private firm engaged in manufacturing in Massachusetts earns annually, on an average (including both sexes and all ages), \$362.23. If, in addition to wages, the entire net profits made by private firms were divided equally among the employes of private firms, the share of each employé would be \$37.47, and his possible annual income would reach \$399.70, being an increase of 10.34 per cent.

2. The employé of a corporation earns annually, on an average (including both sexes and all ages), \$333.22. If, in addition to wages, the entire net profits made by corporations were divided equally among the employes of corporations, the share of each employé would be \$89.44, and his possible annual income would reach \$422.66, being an increase of 26.84 per cent.

3. The employé of a manufacturing establishment in Massachusetts, including both private firms and corporations, earns annually, on an average (including both sexes and all ages), \$351.02. If, in addition to wages, the entire net profits made by private firms and corporations were divided equally among their employes, the share of each employé would be \$57.55, and his possible annual income would reach \$408.57, being an increase of 16.40 per cent.

We have now arrived at *the ultimate of profit sharing* in productive enterprises involving nearly 70 per cent of the entire manufactured product of Massachusetts. The sum of



\$57.55, being an increase of 16.40 per cent on the average annual earnings, or a little less than one-sixth, is the average sum that would accrue to each employé, regardless of sex or age, *if the entire net profits made by the manufacturers, in the year covered by the returns, were added to the wages fund and divided equally among the employés.* These returns covering nearly 70 per cent may be regarded as valid for the entire product for the reasons stated on pages 417 and 467, *ante.*

### GROSS PROFITS TO LABOR.

In the preceding presentation we assumed that *net profits* went to labor and were added to the wages fund. We shall now proceed to show what labor's share would have been if to the wages fund were added the excess of selling price above cost

	INDUSTRIES.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN—		
		Private Firms	Corporations	All Establishments
1	Agricultural implements, . . . . .	\$437.50	\$400.70	\$405.88
2	Arms and ammunition, . . . . .	561.45	560.22	561.30
3	Artificial teeth and dental work, . . . . .	554.58	—	554.58
4	Artisans' tools, . . . . .	414.66	484.14	446.94
5	Boots and shoes, . . . . .	385.89	417.06	387.12
6	Boxes (paper and wooden), . . . . .	303.96	386.05	309.54
7	Brick, tiles, and sewer pipe, . . . . .	269.00	128.21	231.95
8	Brooms, brushes, and mops, . . . . .	316.77	313.07	416.44
9	Building (including concrete walks, paving, etc.), . . . . .	364.92	420.62	366.26
10	Burial cases, caskets, coffins, etc., . . . . .	401.66	314.57	477.19
11	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	310.95	285.60	289.27
12	Carriages and wagons, . . . . .	452.13	428.94	450.96
13	Charcoal and kindlers (including fireworks and matches), . . . . .	192.37	363.64	222.51
14	Chemical preparations, compounded (including fertilizers), . . . . .	362.69	476.54	450.31
15	Clothing, . . . . .	296.90	238.96	291.32
16	Cooking, lighting, and heating apparatus, . . . . .	544.57	479.56	500.39
17	Cordage and twine, . . . . .	245.00	265.06	280.32
18	Cotton goods, . . . . .	268.53	268.00	268.03
19	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	374.02	344.26	367.44
20	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	465.12	331.43	417.27
21	Electrical apparatus and appliances, . . . . .	496.34	585.04	573.04
22	Electroplating (including jewelry burnishing and lapidary work), . . . . .	438.03	—	438.03
23	Fancy articles (including fine arts and taxidermy), . . . . .	211.88	200.00	211.73

of production; or, in other words, *gross profits*. This plan will give to labor the amounts set apart for interest, depreciation, selling expenses, allowance for bad debts, and net profits, or the entire amount above the actual cost of production. As in the previous presentation, if losses occur they are subtracted from the wages fund.

The presentation by industries which follows shows, first, for private firms, corporations, and all establishments, the average annual earnings of employes, including both sexes and all ages; second, the possible addition if the entire amount in excess of actual cost of production (or gross profits) be added to the wages fund; and, third, the possible annual income of employes from combined wages fund and the excess of selling price above cost of production (or gross profits).

POSSIBLE ADDITION IF THE ENTIRE AMOUNT IN EXCESS OF ACTUAL COST OF PRODUCTION BE ADDED TO THE WAGES FUND IN —			POSSIBLE ANNUAL INCOME OF EMPLOYEES FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION IN —			
Private Firms	Corporations	All Establishments	Private Firms	Corporations	All Establishments	
\$217.28	\$375.23	\$352.98	\$654.78	\$775.93	\$758.86	1
258.28	459.02	281.97	819.73	1,019.24	843.27	2
4,974.80	—	4,974.80	5,529.38	—	5,529.38	3
181.92	355.99	262.78	596.58	840.13	709.72	4
170.74	270.03	174.64	556.63	687.09	561.76	5
161.33	351.05	174.22	465.29	737.10	483.76	6
67.80	162.61	92.76	336.80	290.82	324.71	7
233.09	516.83	258.94	549.86	829.90	575.38	8
199.23	284.42	201.25	564.15	705.04	567.50	9
284.30	238.07	280.52	775.96	552.64	757.71	10
124.50	168.36	162.00	435.45	453.96	451.27	11
284.94	466.72	293.97	737.07	895.66	744.95	12
1,315.90	815.82	1,227.89	1,508.27	1,179.46	1,450.40	13
294.05	859.83	733.30	636.74	1,335.37	1,183.61	14
239.86	346.03	295.26	586.76	584.99	586.58	15
292.15	438.91	391.89	836.72	918.47	892.28	16
144.10	201.96	188.47	389.70	467.02	448.99	17
36.93	42.82	42.50	305.46	310.82	310.53	18
1,777.93	2,139.87	1,857.98	2,151.95	2,484.13	2,225.42	19
367.24	244.06	323.15	832.36	675.49	740.42	20
52.00	198.72	178.87	548.34	783.76	751.91	21
488.72	—	488.72	926.75	—	926.75	22
278.95	215.00	278.16	490.83	415.00	439.89	23

	INDUSTRIES.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN—		
		Private Firms	Corporations	All Establishments
1	Flax, hemp, and jute goods (including linen),	\$237.91	\$247.61	\$244.64
2	Food preparations (including salt), . . . . .	263.06	270.22	264.03
3	Furniture, . . . . .	415.34	430.10	417.47
4	Gas and residual products, . . . . .	440.50	397.90	398.00
5	Glass, . . . . .	420.60	458.16	451.88
6	Glue, isinglass, and starch, . . . . .	298.10	214.42	290.19
7	Hair work (animal and human), . . . . .	282.86	—	282.86
8	Hosiery and knit goods, . . . . .	223.07	281.35	258.89
9	Ink, manilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	321.48	256.90	298.07
10	Ivory, bone, shell, and horn goods, etc., . . . . .	316.60	369.43	340.25
11	Leather, . . . . .	442.15	509.45	443.34
12	Liquors and beverages (not spirituous), . . . . .	378.56	296.36	370.19
13	Liquors: malt, distilled, and fermented, . . . . .	426.67	760.54	450.82
14	Lumber, . . . . .	266.58	370.62	271.52
15	Machines and machinery, . . . . .	405.20	457.68	435.45
16	Metals and metallic goods (including clocks and watches), . . . . .	423.59	436.68	430.44
17	Models and patterns, . . . . .	514.01	—	514.01
18	Musical instruments and materials, . . . . .	582.09	681.20	615.16
19	Oils and illuminating fluids, . . . . .	427.93	377.01	395.87
20	Paints, colors, and crude chemicals (including dyestuffs), . . . . .	471.94	428.59	453.74
21	Paper and paper goods, . . . . .	344.81	370.23	362.05
22	Photographs and photographic materials, . . . . .	402.54	500.90	409.21
23	Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	599.70	541.93	586.16
24	Printing, publishing, and bookbinding, . . . . .	417.81	631.05	441.35
25	Print works, dye works, and bleacheries, . . . . .	346.25	315.14	320.33
26	Railroad construction and equipment, . . . . .	301.68	507.07	491.91
27	Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	309.97	356.83	347.74
28	Scientific instruments and appliances, . . . . .	390.57	416.10	403.81
29	Shipbuilding (including awnings, tents, and decorations), . . . . .	238.47	500.00	245.99
30	Silk and silk goods (including buttons and dress trimmings), . . . . .	300.76	267.13	275.80
31	Sporting and athletic goods, . . . . .	257.37	320.67	261.11
32	Stone, . . . . .	389.47	430.16	397.22
33	Straw and palm leaf goods, . . . . .	212.08	201.88	210.93
34	Tallow, candles, soap, and grease, . . . . .	420.21	575.58	437.98
35	Tobacco, snuff, and cigars, . . . . .	395.78	359.96	390.81
36	Toys and games (children's), . . . . .	314.26	386.03	344.42
37	Trunks and valises, . . . . .	344.38	—	344.38
38	Whips, lashes, and stocks, . . . . .	329.34	478.54	361.79
39	Wooden goods (including corks, bungs, and taps), . . . . .	393.97	380.44	392.61
40	Woollen goods, . . . . .	301.49	278.82	291.64
41	Worsted goods, . . . . .	250.43	306.21	292.47

POSSIBLE ADDITION IF THE ENTIRE AMOUNT IN EXCESS OF ACTUAL COST OF PRODUCTION BE ADDED TO THE WAGES FUND IN—			POSSIBLE ANNUAL INCOME OF EMPLOYEES FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION IN—			
Private Firms	Corporations	All Establishments	Private Firms	Corporations	All Establishments	
\$71.80	\$188.18	\$152.51	\$309.71	\$435.79	\$397.15	1
436.83	792.57	485.32	999.89	1,062.79	749.35	2
148.31	317.86	172.70	563.65	747.96	590.17	3
1,036.25	1,248.59	1,247.58	1,476.75	1,646.39	1,645.58	4
139.14	260.28	239.94	559.74	718.44	601.79	5
130.67	170.52	134.44	428.77	384.94	424.63	6
138.18	—	138.18	421.04	—	421.04	7
96.96	178.78	146.55	320.03	460.13	404.94	8
411.22	1,023.81	633.28	732.70	1,280.71	931.35	9
208.62	1,129.55	620.86	825.22	1,498.98	961.11	10
302.06	764.56	310.19	744.21	1,274.01	753.53	11
568.33	671.94	578.88	946.89	968.30	949.07	12
1,165.41	2,008.61	1,226.40	1,592.08	2,769.15	1,677.22	13
260.09	282.08	262.74	526.67	652.70	534.26	14
166.83	288.81	237.15	572.03	746.49	672.60	15
181.26	327.46	257.78	604.85	764.14	688.22	16
518.17	—	518.17	1,032.18	—	1,032.18	17
327.81	532.34	396.05	909.90	1,213.54	1,011.21	18
39.44	30.12	38.57	467.37	407.13	429.44	19
370.44	300.57	341.12	842.38	729.16	794.86	20
206.49	249.22	235.47	551.30	619.45	597.52	21
432.22	1,719.32	519.44	834.76	2,220.22	928.65	22
1,196.44	1,706.94	1,316.10	1,796.14	2,248.87	1,902.26	23
487.15	394.12	467.82	904.96	925.17	909.17	24
* 205.76	* 540.42	* 484.58	† 140.49	‡ 540.42	‡ 484.58	25
180.26	112.81	117.79	481.94	619.88	609.70	26
247.63	404.48	374.06	557.60	761.31	721.80	27
249.32	254.71	252.12	639.89	670.81	655.93	28
236.51	1,197.66	264.16	474.98	1,697.66	510.15	29
183.38	199.76	195.54	484.14	466.89	471.34	30
158.32	288.22	165.99	415.69	608.89	427.10	31
168.60	215.28	177.48	558.07	645.44	574.70	32
101.00	183.13	110.22	313.08	385.01	321.15	33
622.21	1,087.84	675.32	1,042.42	1,663.42	1,113.25	34
156.50	241.37	168.30	552.28	601.33	559.11	35
146.01	151.24	148.21	460.27	537.27	492.63	36
295.59	—	295.59	639.97	—	639.97	37
442.25	1,327.22	634.76	771.59	1,805.76	996.55	38
245.66	321.08	253.23	639.63	701.62	645.84	39
207.22	283.13	240.20	508.71	561.95	531.84	40
124.56	166.54	156.20	374.99	472.75	448.67	41

\* Loss.

† After loss is deducted.

‡ Loss, not including average annual earnings.

We present, as in the case of "Net Profits to Labor," a table which supplies for comparison a classification by amounts correlated with the three headlines to the preceding table, each with its three details, making 9 columns brought into comparison with the classification by amounts.

## GROSS PROFITS TO LABOR: FOR 64 INDUSTRIES.

CLASSIFICATION OF AMOUNTS.	AVERAGE ANNUAL EARNINGS (BOTH SEXES AND ALL AGES) IN —			POSSIBLE ADDITION IF THE ENTIRE AMOUNT IN EXCESS OF ACTUAL COST OF PRO- DUCTION BE ADDED TO THE WAGES FUND IN —			POSSIBLE ANNUAL INCOME OF EMPLOYEES FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION IS —		
	Private Firms	Corpo- rations	All Es- tablish- ments	Private Firms	Corpo- rations	All Es- tablish- ments	Private Firms	Corpo- rations	All Es- tablish- ments
Under \$100, . . .	-	-	-	6	2	3	-	-	-
\$100 but under \$200, .	1	1	-	20	11	18	1	-	-
\$200 but under \$300, .	15	14	20	18	15	18	-	1	-
\$300 but under \$400, .	23	18	18	4	9	7	7	3	4
\$400 but under \$500, .	19	15	19	6	4	3	11	8	12
\$500 but under \$600, .	6	9	6	2	2	3	16	5	11
\$600 but under \$700, .	-	1	1	1	1	4	7	8	7
\$700 but under \$800, .	-	1	-	-	2	1	5	11	10
\$800 but under \$900, .	-	-	-	-	2	-	5	3	2
\$900 but under \$1,000,	-	-	-	-	-	-	4	3	7
\$1,000 but under \$1,500,	-	-	-	4	6	4	3	8	5
\$1,500 but under \$2,000,	-	-	-	1	2	1	3	4	3
\$2,000 but under \$2,500,	-	-	-	-	2	-	1	3	1
\$2,500 but under \$3,000,	-	-	-	-	-	-	-	1	-
\$3,000 but under \$4,000,	-	-	-	1	-	1	-	-	-
\$4,000 but under \$5,000,	-	-	-	-	-	-	1	-	1
\$5,000 but under \$6,000,	-	-	-	-	-	-	-	-	-
Not given, . . .	-	*5	-	-	*6	-	-	*6	-
Showing a loss, . . .	-	-	-	1	1	1	-	1	1
WHOLE NUMBER OF INDUSTRIES, . . .	64	64	64	64	64	64	64	64	64

\* No corporations in 5 industries.

In none of the private firms in 64 industries do the average annual earnings of employes, including both sexes and all ages, reach \$600; if gross profits are added to the wages fund, the employes in private firms in 29 industries would have an annual income of more than \$600. As regards the employes of corporations, in no industry do their average annual earnings exceed \$800, but if gross profits are added to the wages fund, the employes of corporations in 22 industries would have an annual income of more than \$800, regardless of sex or age. Finally considering all establishments, we ascertain that in no

industry do the average annual earnings of employes of both sexes and all ages reach \$700, but if gross profits are added to the wages fund, the employes in 29 industries, including private firms and corporations, would have an annual income of more than \$700.

In the text-tabular presentation which follows, the 63 industries are classified under the various amounts representing the combined wages fund and gross profits. After each industry designation, is given, in parenthesis, the average annual earnings for both sexes and all ages (in all establishments). The extent to which the employes in the different industries gain financially by the addition of gross profit to the wages fund can be ascertained by comparing the figures in parentheses with the classification lines (in *italic*) under which the industries are classified.

*\$300 but under \$400.*

Brick, Tiles, and Sewer Pipe (\$231.95).	Flax, Hemp, and Jute Goods (including Linen) (\$244.64).
Cotton Goods (\$268.03).	Straw and Palm Leaf Goods (\$210.93).

*\$400 but under \$500.*

Boxes (Paper and Wooden) (\$309.54).	Hosiery and Knit Goods (\$258.39).
Carpetings (including Cotton, Woolen, and Other Textiles, and Mixed Textiles) (\$289.27).	Oils and Illuminating Fluids (\$395.87).
Cordage and Twine (\$260.52).	Silk and Silk Goods (including Buttons and Dress Trimmings) (\$275.80).
Fancy Articles (including Fine Arts and Taxidermy) (\$211.73).	Sporting and Athletic Goods (\$261.11).
Glue, Isinglass, and Starch (\$290.19).	Toys and Games (Children's) (\$344.42).
Hair Work (Animal and Human) (\$282.86).	Worsted Goods (\$292.47).

*\$500 but under \$600.*

Boots and Shoes (\$387.12).	Lumber (\$271.52).
Brooms, Brushes, and Mops (\$316.44).	Paper and Paper Goods (\$362.05).
Building (including Concrete Walks, Paving, etc.) (\$366.25).	Shipbuilding (including Awnings, Tents, and Decorations) (\$245.99).
Clothing (\$291.32).	Stone (\$397.22).
Furniture (\$417.47).	Tobacco, Snuff, and Cigars (\$390.81).
	Woollen Goods (\$291.64).

*\$600 but under \$700.*

Glass (\$451.85).	Scientific Instruments and Appliances (\$403.81).
Machines and Machinery (\$435.45).	Trunks and Valises (\$344.38).
Metals and Metallic Goods (including Clocks and Watches) (\$430.44).	Wooden Goods (including Corks, Bungs, and Taps) (\$392.61).
Railroad Construction and Equipment (\$491.91).	

*\$700 but under \$800.*

Agricultural Implements (\$405.88).	Food Preparations (including Salt) (\$264.03).
Artisans' Tools (\$446.94).	Leather (\$443.34).
Burial Cases, Caskets, Coffins, etc. (\$477.19).	Paints, Colors, and Crude Chemicals (including Dyestuffs) (\$453.74).
Carriages and Wagons (\$450.98).	Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.) (\$347.74).
Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster) (\$417.27).	
Electrical Apparatus and Appliances (\$573.04).	

*\$800 but under \$900.*

Arms and Ammunition (\$561.30).	Cooking, Lighting, and Heating Apparatus (\$500.39).
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*\$900 but under \$1,000.*

Electroplating (including Jewelry Burnishing and Lapidary Work) (\$438.03).	Liquors and Beverages (Not Spirituous) (\$370.19).
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.) (\$298.07).	Photographs and Photographic Materials (\$409.21).
Ivory, Bone, Shell, and Horn Goods, etc. (\$340.25).	Printing, Publishing, and Bookbinding (\$441.35).
	Whips, Lashes, and Stocks (\$361.79).

*\$1,000 but under \$1,500.*

Charcoal and Kindlers (including Fireworks and Matches) (\$222.51).	Musical Instruments and Materials (\$615.16).
Chemical Preparations, Compounded (including Fertilizers) (\$450.31).	Tallow, Candles, Soap, and Grease (\$437.93).
Models and Patterns (\$514.01).	

*\$1,500 but under \$2,000.*

Gas and Residual Products (\$398.00).	Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.) (\$586.16).
Liquors: Malt, Distilled, and Fermented (\$450.82).	

*\$2,000 but under \$2,500.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.) (\$367.44).	
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*\$5,500 but under \$6,000.*

Artificial Teeth and Dental Work (\$554.58).	
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We give below, for all establishments, a classification of possible annual income to employes resulting from the combination of gross profits with the wages fund, and the number of industries coming under each line of the classification. We also present the total value of goods made and work done in the industries coming under each classification, and show, for each classification line, the percentage of total value of goods made and work done from which this "possible annual income" would come.

CLASSIFICATION OF POSSIBLE ANNUAL INCOME.	Number of Industries	Value of Goods Made and Work Done	Percentages of Value of Goods Made and Work Done
\$300 but under \$400, . . . . .	4	\$71,794,375	10.64
\$400 but under \$500, . . . . .	12	45,140,905	6.69
\$500 but under \$600, . . . . .	11	268,561,161	39.81
\$600 but under \$700, . . . . .	7	74,759,476	11.08
\$700 but under \$800, . . . . .	10	137,479,093	20.38
\$800 but under \$900, . . . . .	2	5,190,461	0.77
\$900 but under \$1,000, . . . . .	7	3,308,793	3.16
\$1,000 but under \$1,500, . . . . .	5	13,924,951	2.06
\$1,500 but under \$2,000, . . . . .	3	14,809,715	2.20
\$2,000 but under \$2,500, . . . . .	1	5,132,639	0.76
\$2,500 but under \$3,000, . . . . .	1	651,857	0.10
Showing a loss, . . . . .	1	15,880,843	2.35
TOTALS, . . . . .	64	\$674,634,269	100.00

The employes whose labor produces 17.33 per cent of the total value of goods made would receive under \$500 for an annual income even if gross profits were added to the wages fund and divided equally among all employes. For making 71.27 per cent of the total product the employes would receive annually from \$500 to \$800, while for producing 9.05 per cent of the total value of goods made certain employes would receive from \$800 to \$6,000 each.

We now present an aggregation for All Industries.

#### GROSS PROFITS TO LABOR. ALL INDUSTRIES.

CLASSIFICATION.	Private Firms	Corporations	All Establishments
Average annual earnings (both sexes and all ages) in —	\$362.23	\$333.22	\$351.02
Possible addition if the entire amount in excess of actual cost of production be added to the wages fund in —	124.24	296.55	190.84
Possible annual income of employes from combined wages fund and the excess of selling price above cost of production in —	486.47	629.77	541.86



We may summarize the results in text as follows :

1. If the gross profits made by private firms are added to the wages fund and the sum divided equally among the employes of private firms, each employé would receive \$124.24 from the gross profits, and his possible annual income would be \$486.47, being an increase of 34.30 per cent above his present average annual earnings.

2. If the gross profits made by corporations are added to the wages fund and the sum divided equally among the employes of corporations, each employé would receive \$296.55 from the gross profits, and his possible annual income would be \$629.77, being an increase of 89 per cent above his present average annual earnings.

3. If the gross profits made by all establishments, including both private firms and corporations, are added to the wages fund and the sum divided equally among the employes of all establishments, each employé would receive \$190.84 from the gross profits, and his possible annual income would be \$541.86, being an increase of 54.37 per cent above his present average annual earnings.

We have now secured another ultimate—the *ultimate of division upon a socialistic basis*. The sum of \$190.84, being an increase of 54.37 per cent on the average annual earnings, or more than one-half, is the average sum that would accrue to each employé, regardless of sex or age, *if the entire gross profits made by Massachusetts manufacturers, represented in the returns, were added to the wages fund and divided equally among the employes.*

Such a division might possibly be made if we assume that the government could absorb the capital involved without interest or rent charges and could carry on the establishments referred to as efficiently and economically as do their present proprietors. The estimate entirely eliminates these proprietors, whether partners or stockholders, from the question, but if any of these were engaged by the government and became its paid officials to carry on the various industries, as would no doubt be necessary, the sums paid them for wages or services would naturally reduce the income of the employes entering into this computation. This, while true in general, would be especially true in some of those industries in which the

greatest apparent increase results to employes by the absorption of gross profits, or those in which the share of the employe rises above the limit of \$800, for these include some in which "profit" really means wage for the personal services and skill of the proprietor as explained on page 533. As it is, dropping 71,025 partners and stockholders from the question entirely, and assuming that all the gross profits *and* the wages fund go to the employes, then each employe, regardless of sex or age, would receive \$541.86 for an annual income, or \$10.42 per week on the average. It may be stated here, by way of information, that 38.79 per cent of the employes now employed in manufacturing industries in Massachusetts receive more than \$10 per week under the present application of the wage system.

#### ALL PROFITS TO LABOR: PERCENTAGES.

The next table which we present is composed of percentages based upon the general tables given under "Net Profits to Labor" and "Gross Profits to Labor." It shows, first, for private firms, corporations, and all establishments, as regards each industry, the percentages of increase or decrease of possible annual earnings derived from combined net profits (or loss) and wages fund, as compared with average annual earnings. In other words, it shows the percentages of gain in private firms, corporations, and all establishments, that would accrue to each employe if net profits were added to the wages fund and divided equally among the employes, bearing in mind that when losses occur they are subtracted before the division is made. It shows, second, the percentages of increase or decrease of possible annual earnings derived from combined wages fund and the excess of selling price above cost of production (or gross profits) as compared with average annual earnings; that is, it shows the percentages of gain that would accrue to each employe in case all the products of labor, above the actual cost of production, were added to the wages fund and divided equally among all the operatives engaged in production without regard to their sex or age.

In the first case, the manufacturer is supposed to give up to labor all the *net profits* that result from his business; in the second case he is supposed to give up to labor his gross profits,

or the entire excess of selling price above cost of production, which would leave him nothing for interest on his money invested, depreciation on value of machinery, selling expenses, or for any losses resulting from bad debts. In one instance the net profits and in the other instance the gross profits are diverted from the owner of capital and employer of labor to labor itself, and that is the reason for the adoption of the heading — "All Profits to Labor."

INDUSTRIES.	PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND AS COMPARED WITH AVERAGE ANNUAL EARNINGS IN —			PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION AS COM- PARED WITH AVERAGE ANNUAL EARNINGS IN —		
	Private Firms	Corpora- tions	All Es- tablish- ments	Private Firms	Corpora- tions	All Es- tablish- ments
Agricultural implements, . . .	+24.65	+46.47	+43.16	+49.66	+93.64	+86.97
Arms and ammunition, . . .	+13.91	+24.76	+15.18	+46.00	+81.94	+56.24
Artificial teeth and dental work, . . .	+743.34	-	+743.34	+897.04	-	+897.04
Artisans' tools, . . .	+18.60	+31.17	+24.93	+43.87	+73.53	+58.80
Boots and shoes, . . .	+17.59	+25.73	+17.93	+44.25	+64.75	+45.11
Boxes (paper and wooden), . . .	+27.09	+46.41	+28.73	+53.08	+90.93	+56.28
Brick, tiles, and sewer pipe, . . .	+12.22	+61.49	+19.39	+52.21	+126.83	+39.99
Brooms, brushes, and mops, . . .	+43.44	+97.47	+48.31	+73.58	+165.08	+81.83
Building (including concrete walks, paving, etc.), . . .	+35.73	+44.25	+35.96	+54.60	+67.62	+54.96
Burial cases, caskets, coffins, etc., . . .	+28.83	+87.09	+28.81	+57.82	+75.68	+58.79
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . .	+0.98	+1.45	+1.38	+40.04	+58.95	+56.00
Carriages and wagons, . . .	+40.10	+99.24	+41.48	+63.02	+108.81	+65.18
Charcoal and kindlers (including fire- works and matches), . . .	+609.50	+199.88	+491.69	+684.05	+224.35	+551.84
Chemical preparations, compounded (including fertilizers), . . .	+29.18	+65.07	+58.60	+81.07	+180.81	+162.84
Clothing, . . .	+64.69	+95.95	+67.16	+97.63	+144.81	+101.36
Cooking, lighting, and heating appa- ratus, . . .	+34.92	+59.57	+50.97	+53.65	+91.52	+78.32
Cordage and twine, . . .	+5.03	+6.53	+6.20	+88.67	+76.19	+72.34
Cotton goods, . . .	-*35.22	-*40.92	-*40.60	+13.75	+15.98	+15.86
Drugs and medicines (including per- fumes, toilet articles, etc.), . . .	+388.79	+508.39	+413.58	+475.36	+621.59	+506.66
Earthen, plaster, and stone ware (in- cluding cement, kaolin, lime, and plaster), . . .	+57.31	+53.45	+56.22	+78.96	+73.64	+77.44
Electrical apparatus and appliances, Electroplating (including jewelry burnishing and lapidary work), . . .	-*5.84	-*18.93	-*17.39	+10.48	+33.97	+31.21
	+84.48	-	+84.48	+111.57	-	+111.57

\* Loss.

INDUSTRIES.	PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND AS COMPARED WITH AVERAGE ANNUAL EARNINGS IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION AS COM- PARED WITH AVERAGE ANNUAL EARNINGS IN—		
	Private Firms	Corpora- tions	All Es- tablish- ments	Private Firms	Corpora- tions	All Es- tablish- ments
Fancy articles (including fine arts and taxidermy), . . . . .	+104.97	+85.75	+104.75	+131.65	+107.50	+131.37
Flax, hemp, and jute goods (including linen), . . . . .	+7.25	+18.25	+14.96	+30.18	+76.00	+62.34
Food preparations (including salt), . . . . .	+79.86	+141.06	+88.40	+166.06	+293.31	+183.81
Furniture, . . . . .	+12.42	+25.71	+14.39	+35.71	+73.90	+41.37
Gas and residual products, . . . . .	+131.75	+175.79	+175.56	+235.24	+313.87	+313.46
Glass, . . . . .	+20.58	+35.35	+33.04	+33.08	+56.81	+53.10
Glue, isinglass, and starch, . . . . .	—*15.03	—*27.27	—*15.89	+43.83	+79.53	+46.38
Hair work (animal and human), . . . . .	—*3.29	—	—*3.29	+48.85	—	+48.85
Hosiery and knit goods, . . . . .	+12.21	+17.85	+15.93	+43.47	+63.54	+56.72
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	+93.83	+292.34	+155.86	+127.91	+398.52	+212.46
Ivory, bone, shell, and horn goods, etc., . . . . .	+40.50	+187.94	+112.16	+65.89	+305.75	+182.47
Leather, . . . . .	+22.55	+49.54	+23.10	+68.32	+160.08	+69.97
Liquors and beverages (not spirituous), . . . . .	+107.67	+162.61	+112.15	+150.13	+226.73	+156.37
Liquors: malt, distilled, and fermented, . . . . .	+194.24	+187.82	+193.46	+273.14	+264.10	+272.04
Lumber, . . . . .	+46.41	+36.20	+46.03	+97.57	+76.11	+96.77
Machines and machinery, . . . . .	+17.44	+25.73	+23.07	+41.17	+63.10	+54.46
Metals and metallic goods (including clocks and watches), . . . . .	+20.92	+36.67	+29.28	+42.79	+74.99	+59.89
Models and patterns, . . . . .	+79.84	—	+79.84	+100.81	—	+100.81
Musical instruments and materials, . . . . .	+33.47	+46.44	+38.26	+56.32	+78.15	+64.38
Oils and illuminating fluids, . . . . .	—*88.12	—*76.40	—*81.09	+9.22	+7.99	+8.48
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	+7.64	+6.83	+7.32	+78.49	+70.13	+75.18
Paper and paper goods, . . . . .	+1.83	+2.06	+1.99	+59.89	+67.31	+65.04
Photographs and photographic materials, . . . . .	+79.90	+255.43	+94.46	+107.37	+343.25	+126.94
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	+140.06	+221.12	+157.62	+199.51	+314.97	+224.53
Printing, publishing, and bookbinding, . . . . .	+82.00	+64.78	+77.70	+116.60	+74.22	+106.00
Print works, dye works, and bleacheries, . . . . .	—*80.25	—*231.57	—*204.27	—*59.43	—*171.46	—*151.28
Railroad construction and equipment, . . . . .	+2.92	+1.09	+1.17	+59.75	+22.25	+28.95
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	+40.28	+57.13	+54.21	+79.89	+113.35	+107.57
Scientific instruments and appliances, . . . . .	+31.79	+31.34	+31.55	+63.83	+61.21	+62.44
Shipbuilding (including awnings, tents, and decorations), . . . . .	+72.98	+176.25	+79.02	+99.18	+239.53	+107.39

\* Loss.

INDUSTRIES.	PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED NET PROFITS (OR LOSS) AND WAGES FUND AS COMPARED WITH AVERAGE ANNUAL EARNINGS IN—			PERCENTAGES OF INCREASE (+), OR DECREASE (-), OF POSSIBLE ANNUAL EARNINGS DERIVED FROM COMBINED WAGES FUND AND THE EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION AS COM- PARED WITH AVERAGE ANNUAL EARNINGS IN—		
	Private Firms	Corpora- tions	All Es- tablish- ments	Private Firms	Corpora- tions	All Es- tablish- ments
Silk and silk goods (including buttons and dress trimmings), . . .	+29.41	+36.05	+34.18	+60.97	+74.78	+70.90
Sporting and athletic goods, . . .	+40.02	+58.47	+41.36	+61.51	+89.88	+63.57
Stone, . . . . .	+27.74	+32.06	+28.03	+43.29	+50.05	+44.6
Straw and palm leaf goods, . . .	+19.65	+37.43	+21.56	+47.62	+90.71	+52.25
Tallow, candles, soap, and grease, . .	+80.49	+102.74	+83.83	+148.07	+189.00	+154.21
Tobacco, snuff, and cigars, . . .	+19.35	+32.81	+21.07	+39.54	+67.05	+43.06
Toys and games (children's), . . .	+19.40	+16.36	+17.96	+46.46	+39.18	+43.03
Trunks and valises, . . . . .	+56.96	-	+56.96	+85.83	-	+85.83
Whips, lashes, and stocks, . . . .	+101.10	+208.81	+132.10	+134.28	+277.35	+175.45
Wooden goods (including corks, bungs, and taps), . . . . .	+36.59	+49.52	+37.85	+62.34	+84.40	+64.50
Woollen goods, . . . . .	+24.08	+35.57	+28.85	+68.73	+101.55	+82.36
Worsted goods, . . . . .	+9.00	+9.84	+9.67	+49.74	+54.39	+53.41

Proper reference should be made, before attaching too much importance to these percentages, to the amounts upon which they are based and which will be found in the general tables under "Net Profits to Labor" and "Gross Profits to Labor." Such references will often disclose the fact that the largest percentages come from increases in comparatively small amounts, or relate to industries doing a comparatively small amount of business.

To bring the percentages into a prominence that will allow of their more careful inspection, we present three tables, relating, respectively, to private firms, corporations, and all establishments. The figures given in the columns headed "Net Profits and Wages Fund" indicate the percentages of increase in the annual income of employes which would result from combining the net profits and wages fund, the comparison being made with the present average annual earnings. The columns headed "Gross Profits and Wages Fund" are built upon a similar plan, but gross profits are combined with the wages fund instead of net profits.

The first table relates to private firms, the 64 industries being classified according to percentages.

## PRIVATE FIRMS.

CLASSIFICATION OF PERCENTAGES.	NUMBER OF INDUSTRIES SHOWING THE SPECIFIED PERCENTAGES OF INCREASE IN POSSIBLE ANNUAL INCOME RESULTING FROM THE COMBINATION OF—	
	Net Profits and Wages Fund	Gross Profits and Wages Fund
Under 10 per cent, . . . . .	7	1
10 but under 20 per cent, . . . . .	10	2
20 but under 30 per cent, . . . . .	10	—
30 but under 40 per cent, . . . . .	5	4
40 but under 50 per cent, . . . . .	6	14
50 but under 60 per cent, . . . . .	2	9
60 but under 70 per cent, . . . . .	1	8
70 but under 80 per cent, . . . . .	4	4
80 but under 90 per cent, . . . . .	3	2
90 but under 100 per cent, . . . . .	1	3
100 but under 200 per cent, . . . . .	6	11
200 but under 300 per cent, . . . . .	—	2
300 but under 400 per cent, . . . . .	1	—
400 but under 500 per cent, . . . . .	—	1
500 but under 600 per cent, . . . . .	—	—
600 but under 700 per cent, . . . . .	1	1
700 but under 800 per cent, . . . . .	1	—
800 but under 900 per cent, . . . . .	—	1
Showing a loss, . . . . .	6	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64

The following table shows the highest and lowest percentages, as regards private firms, resulting, respectively, from the combination of net profits and the wages fund and gross profits and the wages fund :

## PRIVATE FIRMS.

NET PROFITS AND WAGES FUND.		GROSS PROFITS AND WAGES FUND.	
<i>Highest.</i>	Percentages	<i>Highest.</i>	Percentages
Artificial teeth and dental work, . .	748.34	Artificial teeth and dental work, . .	897.04
Charcoal and kindlers (including fireworks and matches), . . .	609.50	Charcoal and kindlers (including fireworks and matches), . . .	684.05
Drugs and medicines (including perfumes, toilet articles, etc.), . .	388.79	Drugs and medicines (including perfumes, toilet articles, etc.), . .	475.36
<i>Lowest.</i>	Percentages	<i>Lowest.</i>	Percentages
Railroad construction and equipment, . . . . .	2.92	Cotton goods, . . . . .	13.75
Paper and paper goods, . . . . .	1.83	Electrical apparatus and appliances, . . . . .	10.48
Carpetings (including cotton, woolen, and other textiles, and mixed textiles), . . . . .	0.98	Oils and illuminating fluids, . . . . .	9.22

The next presentation relates to corporations.

## CORPORATIONS.

CLASSIFICATION OF PERCENTAGES.	NUMBER OF INDUSTRIES SHOWING THE SPECIFIED PERCENTAGES OF INCREASE IN POSSIBLE ANNUAL INCOME RESULTING FROM THE COMBINATION OF —	
	Net Profits and Wages Fund	Gross Profits and Wages Fund
Under 10 per cent, . . . . .	6	1
10 but under 20 per cent, . . . . .	3	1
20 but under 30 per cent, . . . . .	4	1
30 but under 40 per cent, . . . . .	11	2
40 but under 50 per cent, . . . . .	6	—
50 but under 60 per cent, . . . . .	4	4
60 but under 70 per cent, . . . . .	4	7
70 but under 80 per cent, . . . . .	—	13
80 but under 90 per cent, . . . . .	1	3
90 but under 100 per cent, . . . . .	2	4
100 but under 200 per cent, . . . . .	8	10
200 but under 300 per cent, . . . . .	4	6
300 but under 400 per cent, . . . . .	—	5
400 but under 500 per cent, . . . . .	—	—
500 but under 600 per cent, . . . . .	1	—
600 but under 700 per cent, . . . . .	—	1
700 but under 800 per cent, . . . . .	—	—
Not given, . . . . .	*5	*5
Showing a loss, . . . . .	5	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64

\* No corporations in 5 industries.

We next show the highest and lowest percentages as regards corporations.

## CORPORATIONS.

NET PROFITS AND WAGES FUND.		GROSS PROFITS AND WAGES FUND.	
Highest.	Percentages	Highest.	Percentages
Drugs and medicines (including perfumes, toilet articles, etc.), . .	508.39	Drugs and medicines (including perfumes, toilet articles, etc.), . .	621.50
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . .	292.34	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . .	398.52
Photographs and photographic materials, . . . . .	255.43	Photographs and photographic materials, . . . . .	343.25
Lowest.	Percentages	Lowest.	Percentages
Paper and paper goods, . . . . .	2.06	Railroad construction and equipment, . . . . .	22.25
Carpetings (including cotton, woolen, and other textiles, and mixed textiles), . . . . .	1.45	Cotton goods, . . . . .	15.98
Railroad construction and equipment, . . . . .	1.00	Oil and illuminating fluids, . . . . .	7.99

It will be noticed that the same industries show the highest percentages, whether the results are obtained from the combination of net profits and the wages fund or gross profits and the wages fund.

We present similar tables for all establishments, meaning, by that term, private firms and corporations combined.

ALL ESTABLISHMENTS. (PRIVATE FIRMS AND CORPORATIONS):

CLASSIFICATION OF PERCENTAGES.	NUMBER OF INDUSTRIES SHOWING THE SPECIFIED PERCENTAGES OF INCREASE IN POSSIBLE ANNUAL INCOME RESULTING FROM THE COMBINATION OF—	
	Net Profits and Wages Fund	Gross Profits and Wages Fund
Under 10 per cent, . . . . .	6	1
10 but under 20 per cent, . . . . .	7	1
20 but under 30 per cent, . . . . .	10	1
30 but under 40 per cent, . . . . .	6	2
40 but under 50 per cent, . . . . .	5	7
50 but under 60 per cent, . . . . .	5	12
60 but under 70 per cent, . . . . .	1	8
70 but under 80 per cent, . . . . .	3	5
80 but under 90 per cent, . . . . .	3	4
90 but under 100 per cent, . . . . .	1	1
100 but under 200 per cent, . . . . .	8	14
200 but under 300 per cent, . . . . .	—	3
300 but under 400 per cent, . . . . .	—	1
400 but under 500 per cent, . . . . .	2	—
500 but under 600 per cent, . . . . .	—	2
600 but under 700 per cent, . . . . .	—	—
700 but under 800 per cent, . . . . .	1	—
800 but under 900 per cent, . . . . .	—	1
Showing a loss, . . . . .	6	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64

ALL ESTABLISHMENTS. (PRIVATE FIRMS AND CORPORATIONS).

NET PROFITS AND WAGES FUND.		GROSS PROFITS AND WAGES FUND.	
Highest.	Percentages	Highest.	Percentages
Artificial teeth and dental work, .	748.34	Artificial teeth and dental work, .	897.04
Charcoal and kindlers (including fireworks and matches), .	491.69	Charcoal and kindlers (including fireworks and matches), .	551.84
Drugs and medicines (including perfumes, toilet articles, etc.), .	413.58	Drugs and medicines (including perfumes, toilet articles, etc.), .	505.66
Lowest.	Percentages	Lowest.	Percentages
Paper and paper goods, . . . . .	1.99	Railroad construction and equipment, . . . . .	23.95
Carpetings (including cotton, woolen, and other textiles, and mixed textiles), . . . . .	1.38	Cotton goods, . . . . .	15.86
Railroad construction and equipment, . . . . .	1.17	Oils and illuminating fluids, . . . . .	8.48



Again, as in the case of private firms and corporations, we find the same industries with the highest percentages, whether resulting from the combination of net profits and wages fund or gross profits and wages fund.

We bring forward the industries showing the highest percentages, place opposite the value of goods made and work done in these industries, and then ascertain the percentage of total selling price represented by these industries.

INDUSTRIES SHOWING THE HIGHEST PERCENTAGES OF INCREASE IN POSSIBLE ANNUAL INCOME RESULTING FROM THE COMBINATION OF NET AND GROSS PROFITS WITH THE WAGES FUND.	Value of Goods Made and Work Done	Percentages of Value of Goods Made and Work Done
Artificial teeth and dental work, . . . . .	\$651,857	0.10
Charcoal and kindlers (including fireworks and matches), . .	102,090	0.02
Drugs and medicines (including perfumes, toilet articles, etc.), .	5,132,639	0.76
Ink, muclage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	236,116	0.03
Photographs and photographic materials, . . . . .	936,165	0.14
All other industries (59), . . . . .	667,574,802	98.95
TOTALS, . . . . .	\$674,634,269	100.00

It will be seen that if net profits and even gross profits are combined with the wages fund, that the highest percentages of increase possible in annual income affect but an inconsiderable portion of the total value of goods made and work done in the State, being but a trifle in excess of one per cent (1.05) of the total value of product.

We give below an aggregation for All Industries.

ALL PROFITS TO LABOR. ALL INDUSTRIES. PERCENTAGES.

DESCRIPTION OF PERCENTAGES.	Private Firms	Corporations	All Establishments
Percentages of increase (+), or decrease (—), of possible annual earnings derived from combined net profits (or loss) and wages fund as compared with average annual earnings in — . . . . .	+10.34	+26.84	+16.40
Percentages of increase (+), or decrease (—), of possible annual earnings derived from combined wages fund and excess of selling price above cost of production (gross profits) as compared with average annual earnings in — . . . . .	+34.30	+89.00	+54.37

We derive from the above table the following results :

1. If *net profits* are added to the *wages fund* and the sum is divided equally among the employes, the employes of private

firms would receive, on the average, an increase of 10.34 per cent on their present average annual earnings ; the employés of corporations would receive an advance of 26.84 per cent, while the employés of all establishments, including private firms and corporations, would receive an advance of 16.40 per cent, on the average, above their present average annual earnings.

2. If *gross profits* are added to the wages fund and the sum is divided equally among the employés, the employés of private firms would receive, on the average, an increase of 34.30 per cent on their present average annual earnings ; the employés of corporations would receive an advance of 89 per cent, while the employés of all establishments, including private firms and corporations, would receive an advance of 54.37 per cent, on the average, above their present average annual earnings.

The greater percentages of increase in corporations as compared with private firms at once attracts attention. This, without explanation, may be misleading. The first impression conveyed may be that profits are relatively much greater in corporations than in private firms. This is probably true so far as concerns the aggregate sum of profits relatively to the aggregate number of persons employed. That is, in some of the industries in which corporations predominate the aggregate sum of profits in dollars may be larger in proportion to the number of persons employed than in those carried on by private firms. But the rate of profits upon capital, or the amount per stockholder may be no greater, and possibly may be less, for these are the industries requiring large masses of capital and extensive plant. The capital invested, whether in cash or plant, is much greater in the aggregate than in the case of private firms. The product value turned out per employé is also generally greater. The larger capital, plant, and product values per employé in corporations as compared with those in private firms cause larger proportional allowances in the tables for interest, depreciation, and selling expenses. When these items are eliminated, as they are when gross profits are added to the wages fund, the amount to be divided among employés on the basis of "all profits to labor" is therefore much greater in corporations than in private firms, in proportion to the number of persons employed. The percentage of increase in wages is therefore much greater.

### "SHARE AND SHARE ALIKE."

It is evident that either of the suppositions previously considered would be more than just to labor and obviously unfair to capital. In the table which follows, it is assumed that *the net profits and wages fund are combined and divided equally among employes, partners, and stockholders*. In other words, it forms what we have called a **share and share alike** table. The presentation is for private firms, corporations, and all establishments, including private firms and corporations, as regards each industry. For private firms, it shows the amount that would be received, on the basis outlined, by each employé or partner; for corporations, it shows the amount that would be received by each employé or stockholder, while for all establishments it shows the amount that would be received, on the "share and share alike" plan, by each employé, partner, or stockholder.

INDUSTRIES.	AMOUNT THAT WOULD BE RECEIVED BY EACH EMPLOYEE, PARTNER, OR STOCKHOLDER, IF NET PROFITS (OR LOSS) AND THE WAGES FUND WERE COMBINED AND DIVIDED EQUALLY AMONG EMPLOYEES, PARTNERS, OR STOCKHOLDERS		
	Private Firms (Employés or Partners)	Corporations (Employés or Stockholders)	All Establish- ments (Em- ployés, Partners, or Stockhold- ers)
Agricultural implements, . . . . .	\$428.47	\$538.07	\$520.47
Arms and ammunition, . . . . .	620.07	412.66	582.70
Artificial teeth and dental work, . . . . .	476.12	-	476.12
Artisans' tools, . . . . .	420.74	380.30	398.36
Boots and shoes, . . . . .	434.04	455.06	434.94
Boxes (paper and wooden), . . . . .	357.27	472.30	365.86
Brick, tiles, and sewer pipe, . . . . .	282.94	173.41	251.06
Brooms, brushes, and mops, . . . . .	410.90	366.81	405.06
Building (including concrete walks, paving, etc.), . . . . .	438.30	538.62	440.67
Burial cases, caskets, coffins, etc., . . . . .	438.43	184.81	406.44
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	298.58	237.61	245.38
Carriages and wagons, . . . . .	508.96	523.59	509.77
Charcoal and kindlers (including fireworks and matches), . . . . .	1,161.82	133.28	546.75
Chemical preparations, compounded (including fer- tilizers), . . . . .	379.93	588.96	544.97
Clothing, . . . . .	425.83	374.29	420.47
Cooking, lighting, and heating apparatus, . . . . .	699.11	580.28	605.32
Cordage and twine, . . . . .	234.83	238.52	237.71

INDUSTRIES.	AMOUNT THAT WOULD BE RECEIVED BY EACH EMPLOYEE, PARTNER, OR STOCKHOLDER, IF NET PROFITS (OR LOSS) AND THE WAGES FUND WERE COMBINED AND DIVIDED EQUALLY AMONG EMPLOYEES, PARTNERS, OR STOCKHOLDERS		
	Private Firms (Employees or Partners)	Corporations (Employees or Stockholders)	All Establish- ments (Em- ployees, Partners, or Stockhold- ers)
Cotton goods, . . . . .	\$160.26	\$127.43	\$129.37
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	690.30	1,766.74	811.75
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	645.31	437.77	569.87
Electrical apparatus and appliances, . . . . .	408.99	133.41	146.52
Electroplating (including jewelry burnishing and lapidary work), . . . . .	617.54	-	617.54
Fancy articles (including fine arts and taxidermy), . . . . .	342.30	26.54	304.03
Flax, hemp, and jute goods (including linen), . . . . .	247.41	284.32	273.00
Food preparations (including salt), . . . . .	416.88	485.71	427.70
Furniture, . . . . .	420.90	408.06	418.76
Gas and residual products, . . . . .	583.36	249.60	250.24
Glass, . . . . .	452.74	432.98	435.68
Glue, isinglass, and starch, . . . . .	234.72	113.10	220.41
Hair work (animal and human), . . . . .	215.82	-	215.82
Hosiery and knit goods, . . . . .	238.92	283.37	267.02
Ink, muclage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	467.35	712.93	559.72
Ivory, bone, shell, and horn goods, etc., . . . . .	399.54	798.26	595.86
Leather, . . . . .	496.56	581.56	498.35
Liquors and beverages (not spirituous), . . . . .	621.66	407.67	590.38
Liquors: malt, distilled, and fermented, . . . . .	1,068.20	1,243.73	1,086.56
Lumber, . . . . .	298.61	337.99	303.35
Machines and machinery, . . . . .	429.73	489.66	465.26
Metals and metallic goods (including clocks and watches), . . . . .	416.63	497.05	458.24
Models and patterns, . . . . .	705.06	-	705.06
Musical instruments and materials, . . . . .	739.83	968.03	785.21
Oils and illuminating fluids, . . . . .	43.02	75.22	63.30
Paints, colors, and crude chemicals (including dye- stuffs), . . . . .	427.79	302.74	367.83
Paper and paper goods, . . . . .	332.12	316.40	321.05
Photographs and photographic materials, . . . . .	490.91	1,351.74	543.38
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	1,145.48	959.06	1,088.33
Printing, publishing, and bookbinding, . . . . .	683.56	468.83	617.93
Print works, dye works, and bleacheries, . . . . .	63.84	*357.38	*291.82
Railroad construction and equipment, . . . . .	295.29	397.54	391.30
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	421.67	492.58	479.89
Scientific instruments and appliances, . . . . .	422.36	418.17	420.11
Shipbuilding (including awnings, tents, and deco- rations), . . . . .	362.56	1,255.68	387.43
Silk and silk goods (including buttons and dress trimmings), . . . . .	376.86	329.78	341.34

\* Loss.

INDUSTRIES.	AMOUNT THAT WOULD BE RECEIVED BY EACH EMPLOYEE, PARTNER, OR STOCKHOLDER, IF NET PROFITS (OR LOSS) AND THE WAGES FUND WERE COMBINED AND DIVIDED EQUALLY AMONG EMPLOYEES, PARTNERS, OR STOCKHOLDERS		
	Private Firms (Employees or Partners)	Corporations (Employees or Stockholders)	All Establish- ments (Em- ployees, Partners, or Stockhold- ers)
Sporting and athletic goods, . . . . .	\$345.08	\$200.91	\$326.04
Stone, . . . . .	454.05	388.54	438.41
Straw and palm leaf goods, . . . . .	250.54	289.68	252.72
Tallow, candles, soap, and grease, . . . . .	576.38	974.32	618.12
Tobacco, snuff, and cigars, . . . . .	397.34	434.10	402.12
Toys and games (children's), . . . . .	342.66	417.49	373.79
Trunks and valises, . . . . .	470.68	-	470.68
Whips, lashes, and stocks, . . . . .	564.02	995.10	676.16
Wooden goods (including corks, bungs, and taps), . . . . .	448.54	467.22	450.44
Woollen goods, . . . . .	365.80	340.31	354.20
Worsted goods, . . . . .	260.82	323.83	310.79

Classifying the industries by the amounts that would be received, with specifications as regards private firms, corporations, and all establishments, we secure the following table :

CLASSIFICATION OF AMOUNTS.	Private Firms	Corpo- rations	All Establish- ments
Under \$100, . . . . .	2	2	1
\$100 but under \$200, . . . . .	1	6	2
\$200 but under \$300, . . . . .	11	7	9
\$300 but under \$400, . . . . .	11	11	13
\$400 but under \$500, . . . . .	23	16	18
\$500 but under \$600, . . . . .	4	6	10
\$600 but under \$700, . . . . .	7	-	5
\$700 but under \$800, . . . . .	2	2	2
\$800 but under \$900, . . . . .	-	1	1
\$900 but under \$1,000, . . . . .	-	3	-
\$1,000 and over, . . . . .	3	4	2
Not given, . . . . .	-	*5	-
Showing a loss, . . . . .	-	1	1
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64	64

\* No corporations in 5 industries.

We next arrange the industries by name in accordance with the classification of amounts as indicated by the "all establishments" column in the preceding table.

*Under \$100.*

## Oils and Illuminating Fluids.

*\$100 but under \$200.*

Cotton Goods.

Electrical Apparatus and Appliances.

*\$200 but under \$300.*

Brick, Tiles, and Sewer Pipe.

Gas and Residual Products.

Carpetings (including Cotton, Wool-  
len, and Other Textiles, and Mixed  
Textiles).

Glue, Isinglass, and Starch.

Cordage and Twine.

Hair Work (Animal and Human).

Flax, Hemp, and Jute Goods (includ-  
ing Linen).

Hosiery and Knit Goods.

Straw and Palm Leaf Goods.

*\$300 but under \$400.*

Artisans' Tools.

Shipbuilding (including Awnings,  
Tents, and Decorations).

Boxes (Paper and Wooden).

Fancy Articles (including Fine Arts  
and Taxidermy).Silk and Silk Goods (including But-  
tons and Dress Trimmings).

Lumber.

Sporting and Athletic Goods.

Paints, Colors, and Crude Chemicals  
(including Dyestuffs).

Toys and Games (Children's).

Paper and Paper Goods.

Woollen Goods.

Railroad Construction and Equip-  
ment.

Worsted Goods.

*\$400 but under \$500.*

Artificial Teeth and Dental Work.

Metals and Metallic Goods (includ-  
ing Clocks and Watches).

Boots and Shoes.

Brooms, Brushes, and Mops.

Rubber and Elastic Goods (includ-  
ing Hose: Rubber, Linen, etc.).Building (including Concrete Walks,  
Paving, etc.).Scientific Instruments and Appli-  
ances.

Burial Cases, Caskets, Coffins, etc.

Stone.

Clothing.

Food Preparations (including Salt).

Tobacco, Snuff, and Cigars.

Furniture.

Trunks and Valises.

Glass.

Wooden Goods (including Corks,  
Bungs, and Taps).

Leather.

Machines and Machinery.

*\$500 but under \$600.*

Agricultural Implements.

Charcoal and Kindlers (including  
Fireworks and Matches).

Arms and Ammunition.

Carriages and Wagons.

Chemical Preparations, Compounded  
(including Fertilizers).

*\$500 but under \$600 — Concluded.*

Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).	Ivory, Bone, Shell, and Horn Goods, etc.
Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).	Liquors and Beverages (Not Spirit- uous). Photographs and Photographic Ma- terials.

*\$600 but under \$700.*

Cooking, Lighting, and Heating Ap- paratus.	Printing, Publishing, and Bookbind- ing.
Electroplating (including Jewelry Burnishing and Lapidary Work).	Tallow, Candles, Soap, and Grease. Whips, Lashes, and Stocks.

*\$700 but under \$800.*

Models and Patterns.	Musical Instruments and Materials.
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*\$800 but under \$900.*

Drugs and Medicines (including Perfumes, Toilet Articles, etc.).

*\$1,000 and over.*

Liquors: Malt, Distilled, and Fer- mented.	Polishes and Dressing (including Em- ery and Sand Paper and Cloth, etc.).
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The meaning of this presentation is easily grasped. We will take a few lines for exemplification. In the industry known as Oils and Illuminating Fluids the amount that would fall to each employé, partner, or stockholder, if net profits (or loss) were combined with the wages fund and the sum divided equally among employés, partners, and stockholders, is less than \$100; in Cotton Goods, \$100 but under \$200; in Hosiery and Knit Goods, \$200 but under \$300; in Paper and Paper Goods, Woollen Goods, and Worsted Goods, \$300 but under \$400; in Boots and Shoes, Clothing, Furniture, Leather, Machines and Machinery, Metals and Metallic Goods (including Clocks and Watches), and Wooden Goods (including Corks, Bungs, and Taps), \$400 but under \$500. The treatment of these few representative industry lines shows plainly the manner of reading the entire presentation and further specification in text seems unnecessary.

We subjoin a statement which shows, as regards private firms, corporations, and all establishments, the largest and

smallest amounts that would be paid to each employé, partner, or stockholder on the "share and share alike" plan.

LARGEST.		SMALLEST.	
<i>Private Firms.</i>	Amounts	<i>Private Firms.</i>	Amounts
Charcoal and kindlers (including fireworks and matches), . . .	\$1,161.82	Cotton goods, . . . . .	\$169.26
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	1,145.48	Print works, dye works, and bleacheries, . . . . .	63.84
Liquors: malt, distilled, and fermented, . . . . .	1,068.20	Oils and illuminating fluids, . .	43.02
<i>Corporations.</i>	Amounts	<i>Corporations.</i>	Amounts
Drugs and medicines (including perfumes, toilet articles, etc.), . .	\$1,766.74	Glue, isinglass, and starch, . .	\$113.10
Photographs and photographic materials, . . . . .	1,351.74	Oils and illuminating fluids, . .	75.22
Shipbuilding (including awnings, tents, and decorations), . . . . .	1,255.68	Fancy articles (including fine arts and taxidermy), . . . . .	26.54
<i>All Establishments.</i>	Amounts	<i>All Establishments.</i>	Amounts
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	\$1,088.33	Electrical apparatus and appliances, . . . . .	\$146.52
Liquors: malt, distilled, and fermented, . . . . .	1,066.66	Cotton goods, . . . . .	129.37
Drugs and medicines (including perfumes, toilet articles, etc.), . .	811.75	Oils and illuminating fluids, . .	63.30

It is apparent that the industries in which the largest amounts would be paid are comparatively small industries. This point is capable of complete statistical demonstration which is accorded it in the following table :

Names of industries in which the largest amounts would be paid to employes, partners, or stockholders, on the "Share and Share Alike" Plan.	Value of Goods Made and Work Done	Percentages of Value of Goods Made and Work Done
Charcoal and kindlers (including fireworks and matches), . .	\$102,690	0.01
Drugs and medicines (including perfumes, toilet articles, etc.), .	5,132,639	0.76
Liquors: malt, distilled, and fermented, . . . . .	7,881,240	1.17
Photographs and photographic materials, . . . . .	936,165	0.14
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	2,354,513	0.35
Shipbuilding (including awnings, tents, and decorations), . .	2,216,565	0.33
All other industries, . . . . .	656,010,457	97.24
TOTALS, . . . . .	\$674,634,269	100.00



We ascertain from the preceding table that the value of goods made and work done in the 6 industries in which the largest sums would be paid on the "share and share alike" plan, that is, amounts in excess of \$1,000 to each employé, partner, or stockholder, amounts to less than 3 per cent (2.76) of the total value of goods made and work done, while the 58 remaining industries would naturally pay a smaller sum than \$1,000 to each employé, partner, or stockholder.

In order to show the distribution of product value in accordance with the "share and share alike" classification of amounts, we present the subjoined table.

CLASSIFICATION OF AMOUNTS.	Number of Industries	Value of Goods Made and Work Done	Percentages of Value of Goods Made and Work Done
Under \$100, . . . . .	1	\$2,294,931	0.34
\$100 but under \$200, . . . . .	2	62,822,834	9.81
\$200 but under \$300, . . . . .	9	38,220,202	5.37
\$300 but under \$400, . . . . .	13	86,605,164	12.84
\$400 but under \$500, . . . . .	18	405,742,080	60.14
\$500 but under \$600, . . . . .	10	18,823,218	2.79
\$600 but under \$700, . . . . .	5	24,473,355	3.63
\$700 but under \$800, . . . . .	2	6,403,250	0.95
\$800 but under \$900, . . . . .	1	5,132,639	0.76
\$900 but under \$1,000, . . . . .	-	-	-
\$1,000 and over, . . . . .	2	10,235,753	1.52
Showing a loss, . . . . .	1	15,880,843	2.35
TOTALS, . . . . .	64	\$674,634,269	100.00

Those employés, partners, and stockholders\* who would receive under \$300 for possible annual income are connected with industries which turn out 15.02 per cent of the total value of goods made and work done. Those employés and employers who would obtain a possible annual income of \$300 but under \$600 are identified with industries which represent 75.77 per cent of the entire annual product value, while those employés and employers who would receive above \$600 are connected with industries that produce 6.86 per cent of the total value of goods made and work done.

We reach the ultimate of the "share and share alike" plan in the following table for All Industries :

## "SHARE AND SHARE ALIKE." ALL INDUSTRIES.

DESCRIPTION OF POSSIBLE ANNUAL INCOME.	Private Firms	Corporations	All Establishments
Amount that would be received by each employé, partner, or stockholder, if net profits (or loss) and the wages fund were combined and divided equally among employés, partners, and stockholders.	\$360.15	\$334.57	\$349.47

The lesson of this table is simple and easily understood. It means that, *in the case of private firms, if net profits and wages are added together and divided equally between the employés and partners, the employer thus sharing alike with each of his employés, the amount falling to each would be \$360.15; in the case of corporations, each employé and stockholder would receive \$334.57, while, as a grand aggregate for all establishments (including private firms and corporations), the wages fund and net profits combined would give \$349.47 to each employé, partner, or stockholder.*

## THE GRAND BALANCE SHEET.

The general table which follows is a grand balance sheet. The basis of presentation is by industries while the details relate to employés as such, partners as such, and stockholders as such. In the case of employés, their present average annual earnings are compared with their possible annual income from net profits and the wages fund combined; in the cases of partners and stockholders their present net profits are compared with their possible annual income from net profits and the wages fund combined; in other words, as regards employés, partners, and stockholders, what they now receive under the wage system is compared with what each would receive on the share and share alike plan, and the relations of the amounts compared are indicated by percentages of increase or decrease.

	INDUSTRIES.	EMPLOYES		
		Average Annual Earnings	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+) or Decrease (-), of Possible Annual Income from Net Profits and Wages Fund as compared with Average Annual Earnings
1	Agricultural implements, . . . . .	\$405.88	\$520.47	+28.23
2	Arms and ammunition, . . . . .	561.30	582.70	+3.81
3	Artificial teeth and dental work, . . . . .	554.58	476.12	-14.15
4	Artisans' tools, . . . . .	446.94	395.36	-10.67
5	Boots and shoes, . . . . .	387.12	434.94	+12.35
6	Boxes (paper and wooden), . . . . .	309.54	365.86	+18.19
7	Brick, tiles, and sewer pipe, . . . . .	231.95	251.66	+8.50
8	Brooms, brushes, and mops, . . . . .	316.44	405.06	+28.01
9	Building (including concrete walks, paving, etc.), . . . . .	366.25	440.67	+20.32
10	Burial cases, caskets, coffins, etc., . . . . .	477.19	406.44	-14.83
11	Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	289.27	245.38	-15.17
12	Carriages and wagons, . . . . .	450.98	509.77	+13.04
13	Charcoal and kindlers (including fireworks and matches), . . . . .	222.51	546.75	+145.73
14	Chemical preparations, compounded (including fertilizers), . . . . .	450.31	544.97	+21.02
15	Clothing, . . . . .	291.32	420.47	+44.33
16	Cooking, lighting, and heating apparatus, . . . . .	500.39	605.33	+20.97
17	Cordage and twine, . . . . .	280.52	237.71	-5.76
18	Cotton goods, . . . . .	268.03	129.37	-51.73
19	Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	367.44	811.75	+120.92
20	Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	417.27	569.87	+36.57
21	Electrical apparatus and appliances, . . . . .	573.04	146.52	-74.43
22	Electroplating (including jewelry burnishing and lapidary work), . . . . .	438.03	617.54	+40.98
23	Fancy articles (including fine arts and taxidermy), . . . . .	211.73	304.03	+43.59
24	Flax, hemp, and jute goods (including linen), . . . . .	244.64	273.00	+11.59
25	Food preparations (including salt), . . . . .	264.03	427.70	+61.99
26	Furniture, . . . . .	417.47	418.76	+0.31
27	Gas and residual products, . . . . .	398.00	250.24	-37.13
28	Glass, . . . . .	451.85	435.68	-3.58
29	Glue, isinglass, and starch, . . . . .	290.19	220.41	-24.06
30	Hair work (animal and human), . . . . .	232.86	215.82	-23.70
31	Hosiery and knit goods, . . . . .	258.39	267.02	+3.34
32	Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	298.07	559.73	+87.73
33	Ivory, bone, shell, and horn goods, etc., . . . . .	340.25	595.86	+75.12
34	Leather, . . . . .	443.34	498.35	+12.41
35	Liquors and beverages (not spirituous), . . . . .	370.19	590.33	+59.48
36	Liquors: malt, distilled, and fermented, . . . . .	450.82	1,086.56	+141.02

PARTNERS			STOCKHOLDERS			
Net Profits (or Loss)	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+), or Decrease (-), of Possi- ble Annual Income from Net Profits and Wages Fund as compared with Net Profits	Net Profits (or Loss)	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+), or Decrease (-), of Possi- ble Annual Income from Net Profits and Wages Fund as compared with Net Profits	
\$395.39	\$520.47	+31.63	\$2,051.16	\$520.47	-74.83	1
2,488.61	582.70	-76.59	199.97	582.70	+191.39	2
467.29	476.12	+1.89	-	-	-	3
456.77	398.36	-12.79	225.28	398.36	+76.83	4
1,494.07	434.94	-70.89	704.55	434.94	-38.27	5
1,013.25	865.86	-63.89	910.79	865.86	-59.83	6
491.19	251.06	-48.77	406.47	251.06	-38.09	7
1,300.09	405.06	-68.84	445.23	405.06	-9.02	8
1,002.41	440.67	-56.04	1,471.89	440.67	-70.05	9
317.20	406.44	+28.13	87.50	406.44	+364.50	10
50.13	245.38	+314.98	18.84	245.38	+1,202.44	11
741.35	509.77	-31.24	768.52	509.77	-33.67	12
6,709.22	546.75	-91.85	101.21	546.75	+440.21	13
453.87	544.97	+20.07	929.70	544.97	-41.38	14
1,295.61	420.47	-67.55	913.49	420.47	-53.97	15
1,939.05	605.32	-68.78	896.29	605.32	-32.46	16
125.44	237.71	+89.50	94.14	237.71	+152.51	17
† 3,408.74	129.37	+103.80	† 452.10	129.37	+128.62	18
882.36	811.75	-8.00	9,401.09	811.75	-91.37	19
1,991.16	569.87	-71.38	1,095.18	569.87	-47.97	20
† 184.75	146.52	+179.31	† 43.33	146.52	+238.15	21
1,199.26	617.64	-48.61	-	-	-	22
827.58	304.03	-63.26	13.19	304.03	+2,206.00	23
551.58	273.00	-50.51	1,518.15	273.00	-81.99	24
1,556.48	427.70	-72.52	1,117.45	427.70	-81.73	25
471.73	418.76	-11.23	340.23	418.76	+23.08	26
773.83	250.24	-67.66	205.96	250.24	+21.50	27
720.14	435.68	-39.50	374.73	435.68	+16.27	28
† 566.40	220.41	+138.91	† 154.40	220.41	+42.75	29
† 34.75	215.82	+521.06	-	-	-	30
670.99	267.02	-53.24	295.22	267.02	-9.55	31
904.97	559.72	-38.15	1,815.00	559.72	-69.16	32
1,130.97	595.86	-47.31	2,087.70	595.86	-71.46	33
1,093.00	498.35	-54.41	814.23	498.35	-38.79	34
1,540.39	590.38	-61.67	530.10	590.38	+11.37	35
4,727.89	1,086.56	-77.02	1,879.51	1,086.56	-42.19	36

† Loss.

	INDUSTRIES.	EMPLOYES		
		Average Annual Earnings	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+), or Decrease (-), of Possible Annual Income from Net Profits and Wages Fund as compared with Average Annual Earnings
1	Lumber, . . . . .	\$271.52	\$303.35	+11.72
2	Machines and machinery, . . . . .	435.45	465.26	+6.85
3	Metals and metallic goods (including clocks and watches), . . . . .	430.44	458.24	+6.46
4	Models and patterns, . . . . .	514.01	705.06	+37.17
5	Musical instruments and materials, . . . . .	615.16	785.21	+27.64
6	Oils and illuminating fluids, . . . . .	385.87	63.30	-84.01
7	Paints, colors, and crude chemicals (including dyestuffs), . . . . .	453.74	367.83	-18.93
8	Paper and paper goods, . . . . .	382.05	321.05	-11.82
9	Photographs and photographic materials, . . . . .	409.21	543.38	+32.79
10	Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	536.16	1,088.33	+85.67
11	Printing, publishing, and bookbinding, . . . . .	441.35	617.93	+40.01
12	Print works, dye works, and bleacheries, . . . . .	320.33	*291.62	-91.04
13	Railroad construction and equipment, . . . . .	491.91	391.30	-20.45
14	Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	347.74	479.89	+38.00
15	Scientific instruments and appliances, . . . . .	403.81	420.11	+4.04
16	Shipbuilding (including awnings, tents, and decorations), . . . . .	245.99	387.43	+57.50
17	Silk and silk goods (including buttons and dress trimmings), . . . . .	275.80	341.34	+23.76
18	Sporting and athletic goods, . . . . .	261.11	326.04	+24.87
19	Stone, . . . . .	397.22	438.41	+10.37
20	Straw and palm leaf goods, . . . . .	210.93	252.72	+19.81
21	Tallow, candles, soap, and grease, . . . . .	437.93	618.12	+41.15
22	Tobacco, snuff, and cigars, . . . . .	390.81	402.12	+2.89
23	Toys and games (children's), . . . . .	344.42	373.79	+8.53
24	Trunks and valises, . . . . .	344.38	470.68	+36.67
25	Whips, lashes, and stocks, . . . . .	361.79	676.15	+86.89
26	Wooden goods (including corks, bungs, and taps), . . . . .	392.61	450.44	+14.73
27	Woollen goods, . . . . .	291.64	354.20	+21.45
28	Worsted goods, . . . . .	292.47	310.79	+6.26

\* Loss, not including average annual earnings.

The arrangement of the preceding table is simple and the facts for any industry may be easily arrived at without repeating them in detail in text form. A few illustrations may, however, be of value in showing the correct manner of reading the table. For instance, in the industry known as "Artisans'

PARTNERS			STOCKHOLDERS			
Net Profits (or Loss)	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+), or Decrease (-), of Possi- ble Annual Income from Net Profits and Wages Fund as compared with Net Profits	Net Profits (or Loss)	Possible Annual Income from Net Profits and Wages Fund	Percentages of Increase (+), or Decrease (-), of Possi- ble Annual Income from Net Profits and Wages Fund as compared with Net Profits	
\$402.92	\$303.85	-24.71	\$436.87	\$303.85	-30.56	1
668.25	465.26	-29.32	663.00	465.26	-29.83	2
386.30	458.24	+18.62	797.86	458.24	-42.57	3
1,319.16	705.06	-46.55	-	-	-	4
3,887.62	785.21	-79.80	2,119.87	785.21	-62.96	5
† 2,079.49	63.30	+103.04	† 1,574.57	63.30	+104.02	6
192.31	367.83	+91.27	57.11	367.83	+544.07	7
110.22	321.05	+191.28	39.17	321.05	+719.63	8
676.88	543.38	-19.72	4,035.15	543.38	-86.53	9
3,270.87	1,088.33	-66.73	1,471.18	1,088.33	-26.02	10
3,046.56	617.93	-79.72	397.02	617.93	+55.64	11
† 8,887.24	† 611.95	+115.74	† 4,556.55	† 611.95	+113.43	12
171.29	391.30	+128.44	19.06	391.30	+1,952.99	13
4,018.23	479.89	-88.06	1,474.52	479.89	-67.45	14
567.76	420.11	-26.01	424.92	420.11	-1.13	15
1,263.56	387.43	-69.34	8,812.50	387.43	-95.60	16
2,697.79	341.34	-87.35	943.80	341.34	-63.83	17
2,323.42	326.04	-85.97	122.60	326.04	+165.94	18
1,128.89	438.41	-61.16	298.47	438.41	+46.89	19
3,248.82	252.72	-92.22	2,623.33	252.72	-90.37	20
1,070.78	618.12	-42.27	2,991.47	618.12	-79.34	21
405.59	402.12	-0.86	1,165.87	402.12	-65.51	22
641.63	873.79	-41.74	832.27	373.79	-55.09	23
1,321.29	470.68	-64.38	-	-	-	24
1,910.62	676.15	-64.61	2,060.00	676.15	-67.18	25
721.82	450.44	-37.60	866.18	450.44	-48.00	26
3,203.23	354.20	-88.94	895.38	354.20	-80.44	27
1,929.21	310.79	-83.89	779.71	310.79	-60.14	28

† Loss.

Tools," the employé, drawing his remuneration from the wage fund only, earns \$446.94 annually; if the net profits are added to the wage fund and his employer is given an equal share with himself, the employé's possible annual income falls to \$398.36, or a decrease of 10.87 per cent. Again, in the case of part-

ners in the industry called "Agricultural Implements," the partner now obtains, on an average, \$395.39 in the shape of net profits, but if to the net profits the wages fund is added and the partner participates equally with his employé in the combined sum, the partner's possible annual income becomes \$520.47, or an increase of 31.63 per cent. For a final illustration, in the industry named "Arms and Ammunition" the stockholder now obtains the sum of \$199.97 in the form of net profits, but, if he is allowed to participate with the employés of the corporation in which he owns stock, he secures a possible annual income of \$582.70, which is an increase of 191.39 per cent as compared with his income from net profits.

As our illustrations have indicated, in certain industries the employés gain by the introduction of the share and share alike plan and in others they lose, and this result is also true as regards partners and stockholders. The recapitulation which follows brings this information into compact form for comparison :

GAIN OR LOSS.	Employés	Partners	Stockholders
Gain, . . . . .	48	16	22
Loss, . . . . .	16	48	37
Not given, . . . . .	-	-	*5
WHOLE NUMBER OF INDUSTRIES, . . . . .	64	64	64

\* No corporations in 5 industries.

This table means that, if the share and share alike plan were introduced into all industries, the employés would gain in 48 industries and lose in 16; partners would gain in 16 industries and lose in 48; stockholders would gain in 22 industries and lose in 37; in 5 industries there are no corporations. This table is, to a certain degree, deceptive. This springs from the fact that in it a gain is a gain and a loss is a loss, without regard to the respective *amounts* of gain or loss. The reader would naturally form the opinion from the gain and loss presentation by industries that the participation of the employé in the net profits and wages fund, having an equal share in their sum with his employer, would be to the employé's

advantage, and so it would, as we have shown, in 48 industries out of 64, or in three-quarters of the industries; but we are dealing with all employes in all industries, with the exception of the salaried class, and the result for all employes in all industries, as shown on page 606, *post*, differs from that indicated by the gain and loss recapitulation.

We next present a table which shows as regards employes, partners, and stockholders, the number of industries in which each, respectively, would gain or lose on the share and share alike plan, with the percentages of gain or loss.

CLASSIFICATION OF PERCENTAGES.	EMPLOYES		PARTNERS		STOCKHOLDERS		
	Gain	Loss	Gain	Loss	Gain	Loss	Not Given
Under 10 per cent, . . . . .	10	2	1	2	-	3	-
10 but under 20 per cent, . . . .	9	6	1	3	2	-	-
20 but under 30 per cent, . . . .	9	3	2	3	2	2	-
30 but under 40 per cent, . . . .	5	1	1	4	-	6	-
40 but under 50 per cent, . . . .	5	-	-	6	2	5	-
50 but under 60 per cent, . . . .	2	1	-	4	1	3	-
60 but under 70 per cent, . . . .	1	-	-	12	-	9	-
70 but under 80 per cent, . . . .	1	1	-	7	1	4	-
80 but under 90 per cent, . . . .	3	1	1	5	-	2	-
90 but under 100 per cent, . . . .	-	1	1	2	-	3	-
100 per cent and over, . . . . .	3	-	9	-	14	-	-
Not given, . . . . .	-	-	-	-	-	-	*5
TOTALS, . . . . .	48	16	16	48	22	37	5

\* No corporations in 5 industries.

On the industry basis, this table is statistically correct, but as in the case of the gain and loss recapitulation on page 602, *ante*, it may convey more meaning to some readers than it should. An industry is an industry, but one industry may employ 50,000 persons while another may employ but 500. One industry may turn out an annual product worth \$100,000,000 while the annual product of another industry may be but \$100,000.

In order to bring to the eye in a graphic manner the names of the industries in which employes, partners, or stockholders *gain* or *lose*, we present the following table in which the sign (+) indicates gain, the sign (—) indicates loss, and the sign (×) indicates no stockholders:



INDUSTRIES.	Employés	Partners	Stockholders
Agricultural implements, . . . . .	+	+	-
Arms and ammunition, . . . . .	+	-	+
Artificial teeth and dental work, . . . . .	-	+	x
Artisans' tools, . . . . .	-	-	+
Boots and shoes, . . . . .	+	-	-
Boxes (paper and wooden), . . . . .	+	-	-
Brick, tiles, and sewer pipe, . . . . .	+	-	-
Brooms, brushes, and mops, . . . . .	+	-	-
Building (including concrete walks, paving, etc.), . . . . .	+	-	-
Burial cases, caskets, coffins, etc., . . . . .	-	+	+
Carpetings (including cotton, woollen, and other textiles, and mixed textiles), . . . . .	-	+	+
Carriages and wagons, . . . . .	+	-	-
Charcoal and kindlers (including fireworks and matches), . . . . .	+	-	+
Chemical preparations, compounded (including fertil- izers), . . . . .	+	+	-
Clothing, . . . . .	+	-	-
Cooking, lighting, and heating apparatus, . . . . .	+	-	-
Cordage and twine, . . . . .	-	+	+
Cotton goods, . . . . .	-	+	+
Drugs and medicines (including perfumes, toilet articles, etc.), . . . . .	+	-	-
Earthen, plaster, and stone ware (including cement, kaolin, lime, and plaster), . . . . .	+	-	-
Electrical apparatus and appliances, . . . . .	-	+	+
Electroplating (including jewelry burnishing and lapi- dary work), . . . . .	+	-	x
Fancy articles (including fine arts and taxidermy), . . . . .	+	-	+
Flax, hemp, and jute goods (including linen), . . . . .	+	-	-
Food preparations (including salt), . . . . .	+	-	-
Furniture, . . . . .	+	-	+
Gas and residual products, . . . . .	-	-	+
Glass, . . . . .	-	-	+
Glue, isinglass, and starch, . . . . .	-	+	+
Hair work (animal and human), . . . . .	-	+	x
Hosiery and knit goods, . . . . .	+	-	-
Ink, mucilage, and paste (including crayons, pencils, crucibles, etc.), . . . . .	+	-	-
Ivory, bone, shell, and horn goods, etc., . . . . .	+	-	-
Leather, . . . . .	+	-	-
Liquors and beverages (not spirituous), . . . . .	+	-	+
Liquors: malt, distilled, and fermented, . . . . .	+	-	-
Lumber, . . . . .	+	-	-
Machines and machinery, . . . . .	+	-	-
Metals and metallic goods (including clocks and watches), . . . . .	+	+	-
Models and patterns, . . . . .	+	-	x
Musical instruments and materials, . . . . .	+	-	-
Oils and illuminating fluids, . . . . .	-	+	+
Paints, colors, and crude chemicals (including dyestuffs), . . . . .	-	+	+
Paper and paper goods, . . . . .	-	+	+
Photographs and photographic materials, . . . . .	+	-	-

INDUSTRIES.	Employés	Partners	Stockholders
Polishes and dressing (including emery and sand paper and cloth, etc.), . . . . .	+	—	—
Printing, publishing, and bookbinding, . . . . .	+	—	+
Print works, dye works, and bleacheries, . . . . .	—	+	+
Railroad construction and equipment, . . . . .	—	+	+
Rubber and elastic goods (including hose: rubber, linen, etc.), . . . . .	+	—	—
Scientific instruments and appliances, . . . . .	+	—	—
Shipbuilding (including awnings, tents, and decorations), . . . . .	+	—	—
Silk and silk goods (including buttons and dress trimmings), . . . . .	+	—	—
Sporting and athletic goods, . . . . .	+	—	+
Stone, . . . . .	+	—	+
Straw and palm leaf goods, . . . . .	+	—	—
Tallow, candles, soap, and grease, . . . . .	+	—	—
Tobacco, snuff, and cigars, . . . . .	+	—	—
Toys and games (children's), . . . . .	+	—	—
Trunks and valises, . . . . .	+	—	×
Whips, lashes, and stocks, . . . . .	+	—	—
Wooden goods (including corks, bungs, and taps), . . . . .	+	—	—
Woollen goods, . . . . .	+	—	—
Worsted goods, . . . . .	+	—	—

To show the respective value of product in those industries for which gain or loss is indicated as regards employés, partners, or stockholders, we present the subjoined table.

GAIN OR LOSS.	EMPLOYÉS			PARTNERS			STOCKHOLDERS		
	Number of Industries	Value of Goods Made and Work Done	Per-cent-ages	Number of Industries	Value of Goods Made and Work Done	Per-cent-ages	Number of Industries	Value of Goods Made and Work Done	Per-cent-ages
Gain, . . .	48	\$542,023,166	80.34	16	\$174,362,017	25.85	22	\$170,302,001	25.24
Loss, . . .	16	132,611,113	19.66	48	500,272,252	74.15	*42	504,332,268	74.76
TOTALS, . .	64	\$674,634,280	100.00	64	\$674,634,269	100.00	64	\$674,634,269	100.00

\* No corporations in 5 industries.

As regards employés, the 48 industries in which they would gain financially on the share and share alike plan turn out 80.34 per cent of the total value of goods made and work done, while the 16 industries in which they would lose financially produce 19.66 per cent; the 16 industries in which partners gain financially represent 25.85 per cent of total product value, while

the 48 industries in which they would lose represent 74.15 per cent; the 22 industries in which stockholders would gain financially by the share and share alike plan make 25.24 per cent of the total manufactured product while the 42 industries (including 5 which have no corporations) in which stockholders would lose make 74.76 per cent of the total product.

We present, finally, the aggregation for All Industries.

DESCRIPTION.	Employés	Partners	Stock-holders
Average annual earnings, . . . . .	\$351.02	×	×
Net profits (or loss), . . . . .	×	\$341.20	\$339.71
Possible annual income from net profits and wages fund combined, . . . . .	\$349.47	\$349.47	\$349.47
Percentages of increase (+), or decrease (—), of possible annual income from net profits and wages fund combined as compared with average annual earnings, . . .	—0.44	×	×
Percentages of increase (+), or decrease (—), of possible annual income from net profits and wages fund combined as compared with net profits, . . . . .	×	+2.42	+2.87

NOTE. — The sign (×) indicates that the inquiry is not applicable.

We are now able to compare the financial results of the wage system with the possible annual income from the share and share alike plan in the same industries for the same period. The results of the grand balance sheet may be briefly summarized.

1. *The employé who received average annual earnings amounting to \$351.02, on the share and share alike plan (or an equal division of the net profits and wages fund combined among employés, partners, and stockholders) would have received \$349.47, or a decrease of 0.44 per cent.*

2. *The partner who obtained net profits amounting to \$341.20 would have received \$349.47 on the share and share alike plan, or an increase of 2.42 per cent.*

3. *The stockholder who obtained net profits amounting to \$339.71 would have received \$349.47 on the share and share alike plan, or an increase of 2.87 per cent.*

4. *Assuming that giving the entire net profits or the entire gross profits to labor would be more than just to labor and consequently unfair to capital, and also assuming that the share*

*and share alike plan is just and fair to both labor and capital, the results prove that the average financial condition of the employé shown under the wage system is slightly better, as a general average, than it would have been if the net profits had been added to the wages fund and the sum equally divided between employés and their employers.*

5. *The average annual financial returns to the employé from the wage system, and from a plan in which the net profits and the wages fund if combined were divided equally among employés and their employers, are substantially the same, the variation being but \$1.55 per year, that sum being the excess paid by the wage system over and above what would have been derived from the share and share alike plan.*

## SUMMARY BY INDUSTRIES.

In order to present a "Summary by Industries" we bring forward from the industry presentations (pages 270-399), as regards each industry, the facts relating to the percentage of establishments reporting that made a profit or did not make a profit, and the percentages of capital invested and value of goods made, respectively, by those establishments making or not making a profit. The relations of net profit to selling price and to capital invested are also shown for each industry.

### *Agricultural Implements.*

In this industry 83.83 per cent of the establishments reporting as to profits made a profit, while 16.67 per cent did not make a profit. The establishments making a profit had 77.44 per cent of the capital invested and made 88.46 per cent of the goods manufactured. The establishments not making a profit had 22.56 per cent of the capital invested and made 11.54 per cent of the goods manufactured. The result for the industry was a net profit amounting to 12.24 per cent of the selling price and equivalent to 6.92 per cent on the capital invested.

### *Arms and Ammunition.*

In this industry 86.36 per cent of the establishments reporting as to profits made a profit, while 13.64 per cent did not make a profit. The establishments making a profit had 88.24 per cent of the capital invested and made 91.96 per cent of the goods manufactured. The establishments not making a profit had 11.76 per cent of the capital invested and made 8.04 per cent of the goods manufactured. The result for the industry was a net profit amounting to 5.38 per cent of the selling price and equivalent to 3.86 per cent on the capital invested.

### *Artificial Teeth and Dental Work.*

In this industry 85.83 per cent of the establishments reporting as to profits made a profit, while 14.17 per cent did not make a profit. The establishments making a profit had 87.43 per cent of the capital invested and made 93.11 per cent of the goods manufactured. The establishments not making a profit had 12.57 per cent of the capital invested and made 6.89 per cent of the goods manufactured. The result for the industry was a net profit amounting to 43.10 per cent of the selling price and equivalent to 97.90 per cent on the capital invested.

### *Artisans' Tools.*

In this industry 89.61 per cent of the establishments reporting as to profits made a profit, while 10.39 per cent did not make a profit. The establishments making a profit had 91.37 per cent of the capital invested and made 94.70 per cent of the goods manufactured. The establishments not making a profit had 8.63 per cent of the capital invested and made 5.80 per cent of the goods manufactured. The result for the industry was a net profit amounting to 10.14 per cent of the selling price and equivalent to 6.05 per cent on the capital invested.

*Boots and Shoes.*

In this industry 94.42 per cent of the establishments reporting as to profits made a profit, while 5.58 per cent did not make a profit. The establishments making a profit had 93.79 per cent of the capital invested and made 94.89 per cent of the goods manufactured. The establishments not making a profit had 6.21 per cent of the capital invested and made 5.11 per cent of the goods manufactured. The result for the industry was a net profit amounting to 4.35 per cent of the selling price and equivalent to 14.06 per cent on the capital invested.

*Boxes (Paper and Wooden).*

In this industry 92.31 per cent of the establishments reporting as to profits made a profit, while 7.69 per cent did not make a profit. The establishments making a profit had 96.60 per cent of the capital invested and made 96.26 per cent of the goods manufactured. The establishments not making a profit had 3.40 per cent of the capital invested and made 3.74 per cent of the goods manufactured. The result for the industry was a net profit amounting to 8.18 per cent of the selling price and equivalent to 12.85 per cent on the capital invested.

*Brick, Tiles, and Sewer Pipe.*

In this industry 89.74 per cent of the establishments reporting as to profits made a profit, while 10.26 per cent did not make a profit. The establishments making a profit had 92.16 per cent of the capital invested and made 93 per cent of the goods manufactured. The establishments not making a profit had 7.84 per cent of the capital invested and made 7 per cent of the goods manufactured. The result for the industry was a net profit amounting to 9.65 per cent of the selling price and equivalent to 5.72 per cent on the capital invested.

*Brooms, Brushes, and Mops.*

In this industry 82.86 per cent of the establishments reporting as to profits made a profit, while 17.14 per cent did not make a profit. The establishments making a profit had 93.60 per cent of the capital invested and made 96.71 per cent of the goods manufactured. The establishments not making a profit had 6.40 per cent of the capital invested and made 3.29 per cent of the goods manufactured. The result for the industry was a net profit amounting to 9.81 per cent of the selling price and equivalent to 22.18 per cent on the capital invested.

*Building (including Concrete Walks, Paving, etc.).*

In this industry 96.98 per cent of the establishments reporting as to profits made a profit, while 3.02 per cent did not make a profit. The establishments making a profit had 93.55 per cent of the capital invested and made 96.67 per cent of the goods manufactured. The establishments not making a profit had 6.45 per cent of the capital invested and made 3.33 per cent of the goods manufactured. The result for the industry was a net profit amounting to 11.98 per cent of the selling price and equivalent to 40.54 per cent on the capital invested.

*Burial Cases, Caskets, Coffins, etc.*

In this industry 93.55 per cent of the establishments reporting as to profits made a profit, while 6.45 per cent did not make a profit. The establishments making a profit had 93.96 per cent of the capital invested and made 98.62 per

cent of the goods manufactured. The establishments not making a profit had 6.04 per cent of the capital invested and made 1.38 per cent of the goods manufactured. The result for the industry was a net profit amounting to 6.82 per cent of the selling price and equivalent to 11.78 per cent on the capital invested.

*Carpetings (including Cotton, Woollen, and Other Textiles, and Mixed Textiles).*

In this industry 83.33 per cent of the establishments reporting as to profits made a profit, while 16.67 per cent did not make a profit. The establishments making a profit had 96.86 per cent of the capital invested and made 94.02 per cent of the goods manufactured. The establishments not making a profit had 3.14 per cent of the capital invested and made 5.98 per cent of the goods manufactured. The result for the industry was a net profit amounting to 0.27 per cent of the selling price and equivalent to 0.24 per cent on the capital invested.

*Carriages and Wagons.*

In this industry 97.78 per cent of the establishments reporting as to profits made a profit, while 2.22 per cent did not make a profit. The establishments making a profit had 96.88 per cent of the capital invested and made 97.62 per cent of the goods manufactured. The establishments not making a profit had 3.62 per cent of the capital invested and made 2.38 per cent of the goods manufactured. The result for the industry was a net profit amounting to 13.41 per cent of the selling price and equivalent to 19.67 per cent on the capital invested.

*Charcoal and Kindlers (including Fireworks and Matches).*

In this industry 100 per cent of the establishments reporting as to profits made a profit. The establishments making a profit had 100 per cent of the capital invested and made 100 per cent of the goods manufactured. The result for the industry was a net profit amounting to 53.46 per cent of the selling price and equivalent to 190.38 per cent on the capital invested.

*Chemical Preparations, Compounded (including Fertilizers).*

In this industry 76.92 per cent of the establishments reporting as to profits made a profit, while 23.08 per cent did not make a profit. The establishments making a profit had 97.88 per cent of the capital invested and made 95.11 per cent of the goods manufactured. The establishments not making a profit had 2.12 per cent of the capital invested and made 4.89 per cent of the goods manufactured. The result for the industry was a net profit amounting to 5.56 per cent of the selling price and equivalent to 5.52 per cent on the capital invested.

*Clothing.*

In this industry 95.88 per cent of the establishments reporting as to profits made a profit, while 4.12 per cent did not make a profit. The establishments making a profit had 87.74 per cent of the capital invested and made 93.80 per cent of the goods manufactured. The establishments not making a profit had 12.26 per cent of the capital invested and made 6.20 per cent of the goods manufactured. The result for the industry was a net profit amounting to 14.05 per cent of the selling price and equivalent to 33.05 per cent on the capital invested.

*Cooking, Lighting, and Heating Apparatus.*

In this industry 90.91 per cent of the establishments reporting as to profits made a profit, while 9.09 per cent did not make a profit. The establishments making a profit had 97.24 per cent of the capital invested and made 97.11 per cent of the goods manufactured. The establishments not making a profit had 2.76 per cent of the capital invested and made 2.89 per cent of the goods manufactured. The result for the industry was a net profit amounting to 16.10 per cent of the selling price and equivalent to 20.24 per cent on the capital invested.

*Corlage and Trolne.*

In this industry 91.67 per cent of the establishments reporting as to profits made a profit, while 8.33 per cent did not make a profit. The establishments making a profit had 99.59 per cent of the capital invested and made 99.70 per cent of the goods manufactured. The establishments not making a profit had 0.41 per cent of the capital invested and made 0.30 per cent of the goods manufactured. The result for the industry was a net profit amounting to 0.87 per cent of the selling price and equivalent to 1.04 per cent on the capital invested.

*Cotton Goods.*

In this industry 63.50 per cent of the establishments reporting as to profits made a profit, while 36.50 per cent did not make a profit. The establishments making a profit had 63.84 per cent of the capital invested and made 67.62 per cent of the goods manufactured. The establishments not making a profit had 36.16 per cent of the capital invested and made 32.38 per cent of the goods manufactured. The result for the industry was a net loss amounting to 10.91 per cent of the selling price and equivalent to a loss of 5.77 per cent on the capital invested.

In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *one per cent* for interest, *two per cent* for depreciation, and *one per cent* for selling expenses, etc., it will leave 1.23 per cent net profit, equivalent to 0.65 per cent on the capital invested, and will give an average net profit to each partner of \$325 and to each stockholder of \$53.

*Drugs and Medicines (including Perfumes, Toilet Articles, etc.).*

In this industry 77.56 per cent of the establishments reporting as to profits made a profit, while 22.44 per cent did not make a profit. The establishments making a profit had 98.88 per cent of the capital invested and made 98.21 per cent of the goods manufactured. The establishments not making a profit had 1.62 per cent of the capital invested and made 1.79 per cent of the goods manufactured. The result for the industry was a net profit amounting to 32.48 per cent of the selling price and equivalent to 74.65 per cent on the capital invested.

*Earthen, Plaster, and Stone Ware (including Cement, Kaolin, Lime, and Plaster).*

In this industry 91.67 per cent of the establishments reporting as to profits made a profit, while 8.33 per cent did not make a profit. The establishments making a profit had 94.79 per cent of the capital invested and made 98.91 per cent of the goods manufactured. The establishments not making a profit had



5.21 per cent of the capital invested and made 1.09 per cent of the goods manufactured. The result for the industry was a net profit amounting to 21.37 per cent of the selling price and equivalent to 25.89 per cent on the capital invested.

*Electrical Apparatus and Appliances.*

In this industry 87.50 per cent of the establishments reporting as to profits made a profit, while 12.50 per cent did not make a profit. The establishments making a profit had 78.52 per cent of the capital invested and made 89.31 per cent of the goods manufactured. The establishments not making a profit had 21.48 per cent of the capital invested and made 10.69 per cent of the goods manufactured. The result for the industry was a net loss amounting to 8.90 per cent of the selling price and equivalent to a loss of 2.88 per cent on the capital invested.

In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *two per cent* for interest, *four per cent* for depreciation, and *two per cent* for selling expenses, etc., it will leave 6.02 per cent net profit, equivalent to 1.93 per cent on the capital invested, and will give an average net profit to each partner of \$187 and to each stockholder of \$28.

*Electroplating (including Jewelry Burnishing and Lapidary Work).*

In this industry 90.32 per cent of the establishments reporting as to profits made a profit, while 9.68 per cent did not make a profit. The establishments making a profit had 86.60 per cent of the capital invested and made 94.39 per cent of the goods manufactured. The establishments not making a profit had 13.40 per cent of the capital invested and made 5.61 per cent of the goods manufactured. The result for the industry was a net profit amounting to 25.20 per cent of the selling price and equivalent to 56.79 per cent on the capital invested.

*Fancy Articles (including Fine Arts and Taxidermy).*

In this industry 93.75 per cent of the establishments reporting as to profits made a profit, while 6.25 per cent did not make a profit. The establishments making a profit had 98.31 per cent of the capital invested and made 94.82 per cent of the goods manufactured. The establishments not making a profit had 1.69 per cent of the capital invested and made 5.18 per cent of the goods manufactured. The result for the industry was a net profit amounting to 32.75 per cent of the selling price and equivalent to 57.18 per cent on the capital invested.

*Flax, Hemp, and Jute Goods (including Linen).*

In this industry 77.78 per cent of the establishments reporting as to profits made a profit, while 22.22 per cent did not make a profit. The establishments making a profit had 52.76 per cent of the capital invested and made 66.65 per cent of the goods manufactured. The establishments not making a profit had 47.24 per cent of the capital invested and made 33.35 per cent of the goods manufactured. The result for the industry was a net profit amounting to 3.14 per cent of the selling price and equivalent to 2.96 per cent on the capital invested.

*Food Preparations (including Salt).*

In this industry 93.86 per cent of the establishments reporting as to profits made a profit, while 6.14 per cent did not make a profit. The establishments making a profit had 93.38 per cent of the capital invested and made 96.21 per cent of the goods manufactured. The establishments not making a profit had 6.62 per cent of the capital invested and made 3.79 per cent of the goods manufactured. The result for the industry was a net profit amounting to 5.64 per cent of the selling price and equivalent to 20.40 per cent on the capital invested.

*Furniture.*

In this industry 88.49 per cent of the establishments reporting as to profits made a profit, while 11.51 per cent did not make a profit. The establishments making a profit had 83.79 per cent of the capital invested and made 85.49 per cent of the goods manufactured. The establishments not making a profit had 16.21 per cent of the capital invested and made 14.51 per cent of the goods manufactured. The result for the industry was a net profit amounting to 4.76 per cent of the selling price and equivalent to 5.60 per cent on the capital invested.

*Gas and Residual Products.*

In this industry 91.43 per cent of the establishments reporting as to profits made a profit, while 8.57 per cent did not make a profit. The establishments making a profit had 97.69 per cent of the capital invested and made 99.24 per cent of the goods manufactured. The establishments not making a profit had 2.31 per cent of the capital invested and made 0.76 per cent of the goods manufactured. The result for the industry was a net profit amounting to 21.01 per cent of the selling price and equivalent to 7.92 per cent on the capital invested.

*Glass.*

In this industry 100 per cent of the establishments reporting as to profits made a profit. The establishments making a profit had 100 per cent of the capital invested and made 100 per cent of the goods manufactured. The result for the industry was a net profit amounting to 12.18 per cent of the selling price and equivalent to 17.73 per cent on the capital invested.

*Glue, Isinglass, and Starch.*

In this industry 90.91 per cent of the establishments reporting as to profits made a profit, while 9.09 per cent did not make a profit. The establishments making a profit had 79.69 per cent of the capital invested and made 81.03 per cent of the goods manufactured. The establishments not making a profit had 20.31 per cent of the capital invested and made 18.97 per cent of the goods manufactured. The result for the industry was a net loss amounting to 2.20 per cent of the selling price and equivalent to a loss of 2.55 per cent on the capital invested.

In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *one per cent* for interest, *two per cent* for depreciation, and *one per cent* for selling expenses, etc., it will leave 4.69 per cent net profit, equivalent to 5.43 per cent on the capital invested, and will give an average net profit to each partner of \$1,265 and to each stockholder of \$127.

*Hair Work (Animal and Human).*

In this industry 95.45 per cent of the establishments reporting as to profits made a profit, while 4.55 per cent did not make a profit. The establishments making a profit had 99.99 per cent of the capital invested and made 99.99 per cent of the goods manufactured. The establishments not making a profit had 0.01 per cent of the capital invested and made 0.01 per cent of the goods manufactured. The result for the industry was a net loss amounting to 0.50 per cent of the selling price and equivalent to a loss of 1.00 per cent on the capital invested.

In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit. If we make an allowance of *one per cent* for interest, *two per cent* for depreciation, and *one per cent* for selling expenses, etc., it will leave 5.82 per cent net profit, equivalent to 11.73 per cent on the capital invested, and will give an average net profit to each partner of \$898.

*Hosiery and Knit Goods.*

In this industry 93.75 per cent of the establishments reporting as to profits made a profit, while 6.25 per cent did not make a profit. The establishments making a profit had 94.85 per cent of the capital invested and made 96.70 per cent of the goods manufactured. The establishments not making a profit had 5.15 per cent of the capital invested and made 3.30 per cent of the goods manufactured. The result for the industry was a net profit amounting to 4.02 per cent of the selling price and equivalent to 4.09 per cent on the capital invested.

*Ink, Mucilage, and Paste (including Crayons, Pencils, Crucibles, etc.).*

In this industry 100 per cent of the establishments reporting as to profits made a profit. The establishments making a profit had 100 per cent of the capital invested and made 100 per cent of the goods manufactured. The result for the industry was a net profit amounting to 22.65 per cent of the selling price and equivalent to 34.92 per cent on the capital invested.

*Ivory, Bone, Shell, and Horn Goods, etc.*

In this industry 96 per cent of the establishments reporting as to profits made a profit, while 4 per cent did not make a profit. The establishments making a profit had 99.50 per cent of the capital invested and made 96.10 per cent of the goods manufactured. The establishments not making a profit had 0.50 per cent of the capital invested and made 3.90 per cent of the goods manufactured. The result for the industry was a net profit amounting to 19.22 per cent of the selling price and equivalent to 15.42 per cent on the capital invested.

*Leather.*

In this industry 92.64 per cent of the establishments reporting as to profits made a profit, while 7.36 per cent did not make a profit. The establishments making a profit had 81.86 per cent of the capital invested and made 86.45 per cent of the goods manufactured. The establishments not making a profit had 18.14 per cent of the capital invested and made 13.55 per cent of the goods

manufactured. The result for the industry was a net profit amounting to 3.43 per cent of the selling price and equivalent to 8.13 per cent on the capital invested.

*Liquors and Beverages (Not Spirituous).*

In this industry 96 per cent of the establishments reporting as to profits made a profit, while 4 per cent did not make a profit. The establishments making a profit had 98.90 per cent of the capital invested and made 97.97 per cent of the goods manufactured. The establishments not making a profit had 1.10 per cent of the capital invested and made 2.03 per cent of the goods manufactured. The result for the industry was a net profit amounting to 23.30 per cent of the selling price and equivalent to 31.39 per cent on the capital invested.

*Liquors: Malt, Distilled, and Fermented.*

In this industry 93.48 per cent of the establishments reporting as to profits made a profit, while 6.52 per cent did not make a profit. The establishments making a profit had 99.04 per cent of the capital invested and made 99.37 per cent of the goods manufactured. The establishments not making a profit had 0.96 per cent of the capital invested and made 0.63 per cent of the goods manufactured. The result for the industry was a net profit amounting to 20.41 per cent of the selling price and equivalent to 24.43 per cent on the capital invested.

*Lumber.*

In this industry 87.56 per cent of the establishments reporting as to profits made a profit, while 12.44 per cent did not make a profit. The establishments making a profit had 86.87 per cent of the capital invested and made 92.05 per cent of the goods manufactured. The establishments not making a profit had 13.13 per cent of the capital invested and made 7.95 per cent of the goods manufactured. The result for the industry was a net profit amounting to 7.77 per cent of the selling price and equivalent to 9.50 per cent on the capital invested.

*Machines and Machinery.*

In this industry 91.29 per cent of the establishments reporting as to profits made a profit, while 8.71 per cent did not make a profit. The establishments making a profit had 77.60 per cent of the capital invested and made 90.67 per cent of the goods manufactured. The establishments not making a profit had 22.40 per cent of the capital invested and made 9.33 per cent of the goods manufactured. The result for the industry was a net profit amounting to 8.33 per cent of the selling price and equivalent to 6.76 per cent on the capital invested.

*Metals and Metallic Goods (including Clocks and Watches).*

In this industry 91.99 per cent of the establishments reporting as to profits made a profit, while 8.01 per cent did not make a profit. The establishments making a profit had 90.56 per cent of the capital invested and made 93.86 per cent of the goods manufactured. The establishments not making a profit had 9.44 per cent of the capital invested and made 6.14 per cent of the goods manufactured. The result for the industry was a net profit amounting to 9.23 per cent of the selling price and equivalent to 9.85 per cent on the capital invested.

*Models and Patterns.*

In this industry 97.30 per cent of the establishments reporting as to profits made a profit, while 2.70 per cent did not make a profit. The establishments making a profit had 99.43 per cent of the capital invested and made 97.73 per cent of the goods manufactured. The establishments not making a profit had 0.57 per cent of the capital invested and made 2.27 per cent of the goods manufactured. The result for the industry was a net profit amounting to 30.04 per cent of the selling price and equivalent to 75.48 per cent on the capital invested.

*Musical Instruments and Materials.*

In this industry 96.92 per cent of the establishments reporting as to profits made a profit, while 3.08 per cent did not make a profit. The establishments making a profit had 96.11 per cent of the capital invested and made 94.63 per cent of the goods manufactured. The establishments not making a profit had 3.89 per cent of the capital invested and made 5.37 per cent of the goods manufactured. The result for the industry was a net profit amounting to 11.68 per cent of the selling price and equivalent to 15.95 per cent on the capital invested.

*Oils and Illuminating Fluids.*

In this industry 70 per cent of the establishments reporting as to profits made a profit, while 30 per cent did not make a profit. The establishments making a profit had 34.42 per cent of the capital invested and made 41.03 per cent of the goods manufactured. The establishments not making a profit had 65.58 per cent of the capital invested and made 58.97 per cent of the goods manufactured. The result for the industry was a net loss amounting to 7.48 per cent of the selling price and equivalent to a loss of 9.34 per cent on the capital invested.

In this industry the excess of selling price above the cost of production is not large enough to permit the subtraction of the specified percentages for interest, depreciation, selling expenses, etc. The application of these percentages results in the indicated net loss instead of a net profit.

*Paints, Colors, and Crude Chemicals (including Dyestuffs).*

In this industry 88.89 per cent of the establishments reporting as to profits made a profit, while 11.11 per cent did not make a profit. The establishments making a profit had 85.17 per cent of the capital invested and made 88.42 per cent of the goods manufactured. The establishments not making a profit had 14.83 per cent of the capital invested and made 11.58 per cent of the goods manufactured. The result for the industry was a net profit amounting to 0.96 per cent of the selling price and equivalent to 1.15 per cent on the capital invested.

*Paper and Paper Goods.*

In this industry 81.48 per cent of the establishments reporting as to profits made a profit, while 18.52 per cent did not make a profit. The establishments making a profit had 85.38 per cent of the capital invested and made 86.46 per cent of the goods manufactured. The establishments not making a profit had 14.62 per cent of the capital invested and made 13.54 per cent of the goods manufactured. The result for the industry was a net profit amounting to 0.32 per cent of the selling price and equivalent to 0.29 per cent on the capital invested.

*Photographs and Photographic Materials.*

In this industry 94.78 per cent of the establishments reporting as to profits made a profit, while 5.22 per cent did not make a profit. The establishments making a profit had 97.21 per cent of the capital invested and made 97.47 per cent of the goods manufactured. The establishments not making a profit had 2.79 per cent of the capital invested and made 2.53 per cent of the goods manufactured. The result for the industry was a net profit amounting to 25.77 per cent of the selling price and equivalent to 39.84 per cent on the capital invested.

*Polishes and Dressing (including Emery and Sand Paper and Cloth, etc.).*

In this industry 86.11 per cent of the establishments reporting as to profits made a profit, while 13.89 per cent did not make a profit. The establishments making a profit had 93.07 per cent of the capital invested and made 95.02 per cent of the goods manufactured. The establishments not making a profit had 6.93 per cent of the capital invested and made 4.98 per cent of the goods manufactured. The result for the industry was a net profit amounting to 19.94 per cent of the selling price and equivalent to 26.09 per cent on the capital invested.

*Printing, Publishing, and Bookbinding.*

In this industry 94.24 per cent of the establishments reporting as to profits made a profit, while 5.76 per cent did not make a profit. The establishments making a profit had 92.61 per cent of the capital invested and made 94.54 per cent of the goods manufactured. The establishments not making a profit had 7.39 per cent of the capital invested and made 5.46 per cent of the goods manufactured. The result for the industry was a net profit amounting to 22.65 per cent of the selling price and equivalent to 34.06 per cent on the capital invested.

*Print Works, Dye Works, and Bleacheries.*

In this industry 84.62 per cent of the establishments reporting as to profits made a profit, while 15.38 per cent did not make a profit. The establishments making a profit had 52.32 per cent of the capital invested and made 51.50 per cent of the goods manufactured. The establishments not making a profit had 47.68 per cent of the capital invested and made 48.50 per cent of the goods manufactured. The result for the industry was a net loss amounting to 38.54 per cent of the selling price and equivalent to a loss of 36.25 per cent on the capital invested.

This industry includes both large print works and bleacheries engaged in the bleaching and finishing of textiles and small establishments whose work consists in bleaching and dyeing various articles of clothing. Although the print works, dye works, and bleacheries engaged in the treatment of textiles returned the full capital invested, and stock used (which included all textiles submitted to the various processes), in the majority of cases only the *added value* derived from these processes was entered under "Value of Goods Made and Work Done" and this accounts for the fact that this is the only industry in which the cost of production exceeds the selling price. A full explanation of the peculiar condition of this industry, as indicated by the returns, will be found in those portions of the Analysis which consider "Cost of Production" and "Relation of Cost of Production to Selling Price." The changes were

not made in the tables on pages 364 and 365 because it was deemed best to present them at first in the exact form in which they were given in the certified returns of the manufacturers.

On page 481, *ante*, we stated that we should endeavor to rehabilitate this industry. As its abnormal condition is undoubtedly due to an excessive value for stock used being returned, as explained on pages 479-481, *ante*, the only way in which to bring the industry to the plane occupied by the other industries is to make an arbitrary reduction in the value of stock used and then note the effect upon the industry. In the table on page 364, *ante*, the stock used formed 81.19 per cent of the cost of production. We have assumed that the stock used should bear the same relation to the cost of production that it does in "Cotton Goods," or 62.03 per cent, and in the following tables we see the results of such an assumption:

*Cost of Production.* [65 Establishments.]

CLASSIFICATION.	Percentages of Cost of Production
Stock used, . . . . .	62.03
Salaries, . . . . .	2.76
Wages, . . . . .	29.96
Rent, . . . . .	0.37
Taxes, . . . . .	1.18
Insurance, . . . . .	0.26
Freight, . . . . .	0.40
New equipment, . . . . .	0.18
Repairs, . . . . .	2.49
Other expenses, . . . . .	0.38
TOTAL, . . . . .	100.00

*Relation of Cost of Production to Selling Price.* [65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Stock used, . . . . .	39.50
Salaries, . . . . .	1.76
Wages, . . . . .	19.07
Rent, . . . . .	0.23
Taxes, . . . . .	0.75
Insurance, . . . . .	0.16
Freight, . . . . .	0.25
New equipment, . . . . .	0.12
Repairs, . . . . .	1.59
Other expenses, . . . . .	0.25
Excess of Selling Price above Cost of Production, . . . . .	*36.32
TOTAL, . . . . .	100.00

\* Equivalent to 34.18 per cent on amount of capital invested.

*Distribution of Excess of Selling Price above Cost of Production.*  
[65 Establishments.]

CLASSIFICATION.	Percentages of Selling Price
Interest (5 per cent on cash and credit capital), . . . . .	2.64
Depreciation (10 per cent on value of machinery, implements, and tools), . . . . .	2.36
Allowance for selling expenses and losses by bad debts (5 per cent on selling price), . . . . .	5.00
<b>Net profit, . . . . .</b>	<b>*26.32</b>
<b>TOTAL (percentage of selling price above cost of production), . . . . .</b>	<b>36.32</b>

\* Equivalent to 24.77 per cent on amount of capital invested.

*Comparison of Earnings and Profits.*

[In this table the number and average yearly earnings of employes are drawn from the returns of 96 establishments, the respective numbers of private firms and corporations being shown in the foot-notes. The figures relating to the number of partners or stockholders, the average investment by each partner or stockholder, and the average net profit to each partner or stockholder, are drawn from the 65 establishments which made returns as to net profits.]

CLASSIFICATION.	Numbers and Amounts
<i>Private Firms.</i>	
Average yearly earnings of 1,497 employes (both sexes and all ages), . . . . .	*\$346.25
Number of partners, . . . . .	66
Average investment by each partner, . . . . .	\$14,694
Average net profit to each partner, . . . . .	†\$3,642
<i>Corporations.</i>	
Average yearly earnings of 7,474 employes (both sexes and all ages), . . . . .	†\$315.14
Number of stockholders, . . . . .	1,117
Average investment by each stockholder, . . . . .	\$11,455
Average net profit to each stockholder, . . . . .	†\$2,837

\* For 80 private firms.

† For 16 corporations.

‡ Equivalent to 24.77 per cent on average investment.

*Railroad Construction and Equipment.*

In this industry 60 per cent of the establishments reporting as to profits made a profit, while 40 per cent did not make a profit. The establishments making a profit had 82.31 per cent of the capital invested and made 78.08 per cent of the goods manufactured. The establishments not making a profit had 17.69 per cent of the capital invested and made 21.92 per cent of the goods manufactured. The result for the industry was a net profit amounting to 0.35 per cent of the selling price and equivalent to 0.66 per cent on the capital invested.

*Rubber and Elastic Goods (including Hose: Rubber, Linen, etc.).*

In this industry 88 per cent of the establishments reporting as to profits made a profit, while 12 per cent did not make a profit. The establishments making a profit had 96.21 per cent of the capital invested and made 94.22 per cent of the goods manufactured. The establishments not making a profit had 3.79 per cent of the capital invested and made 5.78 per cent of the goods manufactured. The result for the industry was a net profit amounting to 9.46 per cent of the selling price and equivalent to 11.20 per cent on the capital invested.



*Scientific Instruments and Appliances.*

In this industry 93.75 per cent of the establishments reporting as to profits made a profit, while 6.25 per cent did not make a profit. The establishments making a profit had 92.61 per cent of the capital invested and made 99.67 per cent of the goods manufactured. The establishments not making a profit had 7.39 per cent of the capital invested and made 0.33 per cent of the goods manufactured. The result for the industry was a net profit amounting to 8.96 per cent of the selling price and equivalent to 12.29 per cent on the capital invested.

*Shipbuilding (including Awnings, Tents, and Decorations).*

In this industry 93.60 per cent of the establishments reporting as to profits made a profit, while 6.40 per cent did not make a profit. The establishments making a profit had 93.70 per cent of the capital invested and made 96.22 per cent of the goods manufactured. The establishments not making a profit had 6.30 per cent of the capital invested and made 3.78 per cent of the goods manufactured. The result for the industry was a net profit amounting to 19.07 per cent of the selling price and equivalent to 47 per cent on the capital invested.

*Silk and Silk Goods (including Buttons and Dress Trimmings).*

In this industry 87.50 per cent of the establishments reporting as to profits made a profit, while 12.50 per cent did not make a profit. The establishments making a profit had 91.78 per cent of the capital invested and made 87.25 per cent of the goods manufactured. The establishments not making a profit had 8.22 per cent of the capital invested and made 12.75 per cent of the goods manufactured. The result for the industry was a net profit amounting to 7.66 per cent of the selling price and equivalent to 11.81 per cent on the capital invested.

*Sporting and Athletic Goods.*

In this industry 92.31 per cent of the establishments reporting as to profits made a profit, while 7.69 per cent did not make a profit. The establishments making a profit had 97.09 per cent of the capital invested and made 96.60 per cent of the goods manufactured. The establishments not making a profit had 2.91 per cent of the capital invested and made 3.40 per cent of the goods manufactured. The result for the industry was a net profit amounting to 14.92 per cent of the selling price and equivalent to 24.79 per cent on the capital invested.

*Stone.*

In this industry 95.34 per cent of the establishments reporting as to profits made a profit, while 4.66 per cent did not make a profit. The establishments making a profit had 92.17 per cent of the capital invested and made 94 per cent of the goods manufactured. The establishments not making a profit had 7.83 per cent of the capital invested and made 6 per cent of the goods manufactured. The result for the industry was a net profit amounting to 13.38 per cent of the selling price and equivalent to 20.11 per cent on the capital invested.

*Straw and Palm Leaf Goods.*

In this industry 84.21 per cent of the establishments reporting as to profits made a profit, while 15.79 per cent did not make a profit. The establishments making a profit had 76.18 per cent of the capital invested and made 88 per

cent of the goods manufactured. The establishments not making a profit had 23.82 per cent of the capital invested and made 12 per cent of the goods manufactured. The result for the industry was a net profit amounting to 5.41 per cent of the selling price and equivalent to 9.85 per cent on the capital invested.

*Tallow, Candles, Soap, and Grease.*

In this industry 87.67 per cent of the establishments reporting as to profits made a profit, while 12.33 per cent did not make a profit. The establishments making a profit had 97.43 per cent of the capital invested and made 99.01 per cent of the goods manufactured. The establishments not making a profit had 2.57 per cent of the capital invested and made 0.99 per cent of the goods manufactured. The result for the industry was a net profit amounting to 8.09 per cent of the selling price and equivalent to 17.64 per cent on the capital invested.

*Tobacco, Snuff, and Cigars.*

In this industry 89.52 per cent of the establishments reporting as to profits made a profit, while 10.48 per cent did not make a profit. The establishments making a profit had 87.94 per cent of the capital invested and made 87.84 per cent of the goods manufactured. The establishments not making a profit had 12.06 per cent of the capital invested and made 12.16 per cent of the goods manufactured. The result for the industry was a net profit amounting to 6.64 per cent of the selling price and equivalent to 16.73 per cent on the capital invested.

*Toys and Games (Children's).*

In this industry 90.91 per cent of the establishments reporting as to profits made a profit, while 9.09 per cent did not make a profit. The establishments making a profit had 91.10 per cent of the capital invested and made 88.76 per cent of the goods manufactured. The establishments not making a profit had 8.90 per cent of the capital invested and made 11.24 per cent of the goods manufactured. The result for the industry was a net profit amounting to 6.77 per cent of the selling price and equivalent to 7.21 per cent on the capital invested.

*Trunks and Valises.*

In this industry 91.67 per cent of the establishments reporting as to profits made a profit, while 8.33 per cent did not make a profit. The establishments making a profit had 96.88 per cent of the capital invested and made 94.70 per cent of the goods manufactured. The establishments not making a profit had 3.12 per cent of the capital invested and made 5.30 per cent of the goods manufactured. The result for the industry was a net profit amounting to 13.91 per cent of the selling price and equivalent to 34.93 per cent on the capital invested.

*Whips, Lashes, and Stocks.*

In this industry 96.15 per cent of the establishments reporting as to profits made a profit, while 3.85 per cent did not make a profit. The establishments making a profit had 99.65 per cent of the capital invested and made 99.98 per cent of the goods manufactured. The establishments not making a profit had 0.35 per cent of the capital invested and made 0.02 per cent of the goods manufactured. The result for the industry was a net profit amounting to 31.25 per cent of the selling price and equivalent to 32.01 per cent on the capital invested.

*Wooden Goods (including Corks, Bungs, and Taps).*

In this industry 92.31 per cent of the establishments reporting as to profits made a profit, while 7.69 per cent did not make a profit. The establishments making a profit had 89.83 per cent of the capital invested and made 94.68 per cent of the goods manufactured. The establishments not making a profit had 10.17 per cent of the capital invested and made 5.32 per cent of the goods manufactured. The result for the industry was a net profit amounting to 11.96 per cent of the selling price and equivalent to 16.71 per cent on the capital invested.

*Woollen Goods.*

In this industry 82.27 per cent of the establishments reporting as to profits made a profit, while 17.73 per cent did not make a profit. The establishments making a profit had 88.93 per cent of the capital invested and made 90.07 per cent of the goods manufactured. The establishments not making a profit had 11.07 per cent of the capital invested and made 9.93 per cent of the goods manufactured. The result for the industry was a net profit amounting to 5.20 per cent of the selling price and equivalent to 5.47 per cent on the capital invested.

*Worsted Goods.*

In this industry 76.47 per cent of the establishments reporting as to profits made a profit, while 23.53 per cent did not make a profit. The establishments making a profit had 85.95 per cent of the capital invested and made 81.64 per cent of the goods manufactured. The establishments not making a profit had 14.05 per cent of the capital invested and made 18.36 per cent of the goods manufactured. The result for the industry was a net profit amounting to 2.34 per cent of the selling price and equivalent to 2.20 per cent on the capital invested.

**ALL INDUSTRIES.**

In all industries 92.39 per cent of the establishments reporting as to profits made a profit, while 7.61 per cent did not make a profit. The establishments making a profit had 81.22 per cent of the capital invested and made 88.77 per cent of the goods manufactured. The establishments not making a profit had 18.78 per cent of the capital invested and made 11.23 per cent of the goods manufactured. The result for all industries was a net profit amounting to 3.90 per cent of the selling price and equivalent to 4.83 per cent on the capital invested.

## CONCLUSIONS.

We summarize certain salient results of the investigation as follows, the page references being to parts of the report wherein the subject is considered in detail.

We first bring forward the following general caution :

*No one should make use of these tables without careful consideration of the analyses for each industry which follow the tables. These analyses are intended to supplement the tabular presentations, as deductions drawn from the figures alone without due regard to the analyses would in many cases be misleading.*  
[Page 269.]

### ESTABLISHMENTS AND CAPITAL INVESTED.

*In the returns as to net profits 10,013 establishments are represented, representing 75.45 per cent of the grand aggregate of capital invested in all establishments in all industries, and in them was produced nearly 70 per cent of the entire product turned out in the manufacturing and mechanical industries in the Commonwealth. Of the 10,013 establishments, 9,251, or 92.39 per cent, made a profit while 762, or 7.61 per cent, did not make a profit. The establishments making a profit had 81.22 per cent of the capital invested and made 88.77 per cent of the goods manufactured. The establishments not making a profit had 18.78 per cent of the capital invested and made 11.23 per cent of the goods manufactured. The result for all industries was a net profit amounting to 3.90 per cent of the selling price and equivalent to 4.83 per cent on the capital invested.* [Pages 398, 399 ; 400-431.]

### CLASSIFIED CAPITAL.

*Out of the grand total of \$500,594,377 of capital invested in manufacturing and mechanical industries in the Commonwealth, land, buildings, and fixtures are valued at \$118,886,643, or 23.74 per cent of the total; machinery, implements, and tools at \$115,254,330, or 23.03 per cent; cash at*

\$173,440,947, or 34.65 per cent; and credit at \$93,012,457, or 18.58 per cent. For every \$100 invested the proportions of the details are as follows: Land, buildings, and fixtures \$24; machinery, implements, and tools \$23; cash \$35; credit capital \$18. The total plant values represent \$47 and the total cash and credit capital \$53. [Pages 431-456.]

#### COST OF PRODUCTION.

As to cost of production each \$100 of total cost includes the following elements: Stock (including raw or manufactured materials) \$67.67, salaries \$1.98, wages \$25.66, rent 85 cents, taxes 64 cents, insurance 38 cents, freight \$1.46, new equipment 28 cents, repairs 93 cents, other expenses 15 cents, these items aggregating \$100, or 100 per cent if the items are considered as percentages instead of dollars and cents. By total cost is meant the cost to the manufacturer of the completed product ready for sale but excluding profit. [Pages 476-496.]

#### RELATION OF COST OF PRODUCTION TO SELLING PRICE.

As to selling price each \$100 of selling price includes the following elements: Stock or materials \$58.91, salaries \$1.73, wages \$22.34, rent 73 cents, taxes 56 cents, insurance 33 cents, freight \$1.27, new equipment 24 cents, repairs 81 cents, expenses not previously enumerated 13 cents. In each \$100 there is an excess of selling price above the cost of production amounting to \$12.95. This \$12.95 is the manufacturer's gross profit and is equivalent to 16.01 per cent on the amount of capital invested in and needed to carry on his business. These items as enumerated, including gross profit, aggregate \$100, or 100 per cent if the items are considered as percentages of selling price instead of dollars and cents. By selling price is meant the price for which a given quantity of manufactured product is sold by the manufacturer, and it includes, as shown above, cost of production and profit if any. [Pages 496-516.]

#### DISTRIBUTION OF EXCESS OF SELLING PRICE ABOVE COST OF PRODUCTION.

Of the 64 industries considered in the investigation all but one, Print Works, Dye Works, and Bleacheries, show an

*excess of selling price above the cost of production, that is, all but one made a gross profit. The net profit was determined by the following deductions, determined upon after careful consideration.*

<i>Interest on cash and credit capital, . . . . .</i>	<i>5 per cent.</i>
<i>Depreciation in the value of machinery, implements, and tools, . . . . .</i>	<i>10 per cent.</i>
<i>Allowance for selling expenses, losses, and bad debts, . .</i>	<i>5 per cent.</i>

*After these deductions were made 58 out of 64 industries exhibited a net profit. [Pages 516-532.]*

*The excess of selling price above the cost of production amounts, on the average, to \$12.95 in each \$100 worth of manufactured product. If from this \$12.95 excess are deducted the following: \$2.15 for interest, \$1.90 for depreciation on machinery, implements, and tools, and \$5.00 for selling expenses and to make up the losses from bad debts, there will then remain as net profit \$3.90 which is equivalent to 4.83 per cent on the amount of capital invested, or an annual return of \$4.83 upon each \$100 of invested capital. [Pages 516-532.]*

#### COMPARISON OF EARNINGS AND PROFITS.

*In private firms, each of 257,656 employes (including both sexes and all ages) receives an average of \$362.23 for annual earnings in return for his labor, while each of 12,558 partners in private firms, with an average investment of \$10,701, receives an average net profit of \$517 in return for his money investment and his labor.*

*In corporations, each of 162,310 employes (including both sexes and all ages) receives an average of \$333.22 for annual earnings in return for his labor, while each of 30,967 stockholders in corporations, with an average investment of \$7,857, receives an average net profit of \$379 in return for his money investment, mainly, as comparatively few stockholders render any personal service, unless paid salaries therefor, to the corporations in which they are financially interested. [Pages 533-561.]*

*As a general result in all industries it appears that: First, in private firms, the percentage of the average yearly earnings of each employé of the average net profit to each partner is 70.02, or a little more than seven-tenths; second, in corporations, the percentage of the average yearly earnings of each employé of the average net profit to each stockholder is 87.86, or a little more than seven-eighths. These figures show the narrow money margin between the earnings of employés and the net profits of partners and stockholders. [Pages 533-561.]*

#### NET PROFITS TO LABOR.

*If net profits are added to the wages fund and the sum is divided equally among the employés, the employés of private firms would receive, on the average, an increase of \$37.47, or 10.34 per cent, on their present average annual earnings; the employés of corporations would receive an advance of \$89.44, or 26.84 per cent, while the employés of all establishments, including both private firms and corporations, would receive an advance of \$57.55, or 16.40 per cent, on the average, above their present average annual earnings. [Pages 563-572.]*

#### GROSS PROFITS TO LABOR.

*Eliminating 71,025 partners and stockholders and assuming that all the gross profits and the wages fund go to the employés, then each employé, regardless of sex or age, would receive \$541.86 for an annual income, or \$10.42 per week on the average. Of the employés now employed in manufacturing industries in Massachusetts 38.79 per cent receive more than \$10 per week under the present application of the wage system. [Pages 572-581.]*

*If gross profits are added to the wages fund and the sum is divided equally among the employés, the employés of private firms would receive, on the average, an increase of \$124.24, or 34.30 per cent, on their present average annual earnings; the employés of corporations would receive an advance of \$296.55, or 89 per cent, while the employés of all establishments, including private firms and corporations, would receive an advance of \$190.84, or 54.37 per cent, on the average, above their present average annual earnings. [Pages 572-581.]*

“SHARE AND SHARE ALIKE.”

*In the case of private firms, if net profits and wages are added together and divided equally between the employes and partners, the employer thus sharing alike with each of his employes, the amount falling to each would be \$360.15; in the case of corporations, each employé and stockholder would receive \$334.57, while, as a grand aggregate for all establishments (including private firms and corporations), the wages fund and net profits combined would give \$349.47 to each employé, partner, or stockholder. [Pages 590-597.]*

THE GRAND BALANCE SHEET.

*On the share and share alike plan (or an equal division among employes, partners, and stockholders of the net profits and wages fund combined), the average annual earnings per employé would have been \$349.47 instead of \$351.02, or a decrease of 0.44 per cent; the net profits per partner would have been \$349.47 instead of \$341.20, or an increase of 2.42 per cent; and the net profits per stockholder would have been \$349.47 instead of \$339.71, or an increase of 2.87 per cent.*

*Assuming that giving the entire net profits or the entire gross profits to labor would be more than just to labor and consequently unfair to capital, and also assuming that the share and share alike plan is just and fair to both labor and capital, these results prove that the average financial condition of the employé shown under the wage system is slightly better, as a general average, than it would have been if the net profits had been added to the wages fund and the sum equally divided between the employes and their employers.*

*The average annual financial returns to the employé from the wage system, and from a plan in which the net profits and the wages fund if combined were divided equally between employes and their employers, are substantially the same, the variation being but \$1.55 per year, that sum being the excess paid by the wage system over and above what would have been derived from the share and share alike plan. [Pages 597-607.]*



But little need be said, or can be said, in addition to the results just presented. The figures speak for themselves. That they do or do not support preconceived theories is not a subject for argument or discussion here. No doubt these results will seem totally at variance with opinions of certain persons who have expressed their views in speeches and in the public press. One writer says: "We must learn that the time required for the net earnings or profits of certain industries or occupations to equal the actual cost of the plant or capital is as follows: Distilling once each year; national banking every two years; gaslighting every three years; manufacturing every four years; renting every five years; telephoning every six years; telegraphing every seven years; transportation every ten years; shipping every twelve years; farming every thirty years; laboring every sixty years."

We have presented this as an extreme statement upon one side of the question of profits. The writer states that manufacturing pays back the entire capital invested in four years, but the statistics herein presented show that it would take, as an average for all industries, a period of nearly twenty-one years (20.70).

On the other side we may quote from an influential newspaper, which says editorially: "On the side of the capitalists, the question is, not so much whether they shall yield to the demands for increased wages as whether they can carry on business if the margin which their employes ask for is given them. Competition is so great that this margin is often the only profit that can be counted on, and if it cannot be retained it is discouraging to carry on business at all. . . . The demands of a large proportion of the wage earners at the present time would ultimately wreck or ruin the business corporation or house which should grant them. It is not so much the unwillingness to yield as the impossibility of yielding and continuing in business which weighs upon the employers of labor."

This opinion is diametrically opposite to the first one quoted. The real condition is undoubtedly between these two extremes. The industry results may, in some cases, warrant the first writer's assumptions, while the general results for all indus-

tries approximate closely to the conditions described by the second writer.

The results of the investigation seem to warrant the inference that material improvement in the workingman's condition is not to be expected from an increase of his money wages gained by adding thereto a portion of the profits now absorbed by capital but rather from an increase in his real wages gained through materially increased production accompanied by materially reduced prices, with consequent increased consumption, the rise in the standard of living implied by the increased consumption being accompanied and still further raised by reduced hours of labor.

In the light of the results, too, it would seem that theories of industrial reform which relate chiefly to changes in the mode of distribution of the existing results of production should give place in importance to plans involving an increase in production itself, whereby both labor and capital may have more without diminishing the amount which either now receives.

So far as co-operation, profit sharing, or any other scheme of industrial reform involves an increase in production, so far it moves in the right direction. But the success of any such scheme would seem to rest largely upon its power to augment production in the aggregate, by stimulating endeavor, diminishing waste, promoting harmony, simplifying management, or otherwise, rather than in the changes it might introduce in the mode of division of the fruits of production.

The general results of the investigation indicate average conditions — but no one sees such conditions. We see the exceptionally prosperous establishment, or the very rich manufacturer, and are apt to consider that all manufacturing is equally prosperous and all manufacturers equally rich. The bankruptcy court shows the other side of the picture but its records do not appeal to the eye or the imagination as does a large factory or an imposing mansion.

The results, on the percentage basis, for net profits show that in few industries, if any, can the profits be called exorbitant, all things considered, for we find the largest percentages of net profit in the small industries, while large industries involve small profits, and, sometimes, large losses. As to the general result for all industries, no one, we think, will main-

tain that the percentage of net profit is excessive. While it is true that this conclusion is based upon an average, and may not show the condition in any one industry, it must be remembered that any of the proposed changes so frequently urged for the improvement of our industrial system must be measured by its effect upon average conditions, and that such changes may be fairly tested by comparing the new averages resulting from them with those based upon conditions now prevailing.

Where are we then to look for the margin between cost of production and the price to the consumer? If neither the workingman nor his employer are profiting unduly by the present system, may it not be possible that the middleman, or the distributor of wealth in its various forms, may be securing more than his rightful share, and is thus bearing down upon the two extremes between which he is placed? Are not the creators and consumers of wealth suffering in common from the exactions of the distributors of wealth? This question cannot be answered from data now at hand, but it is evident that the mechanism of distribution, as well as the mechanism of production, must be brought to the statistical basis before the final solution of the question of profits will be secured.

